King County
Department of Natural Resources and Parks
Solid Waste Division
King Street Center, Suite 5701
201 S. Jackson St.
Seattle, WA 98104-3855
206-296-477-4466
TTY Relay: 711
www.kingcounty.gov/solidwaste

June 3, 2022

TO: Jeromeo Cruz, Environmental Scientist III, Environmental Health Division, Public Health – Seattle and King County (PHSKC)

DS LB

VIA: Laura Belt, P.E., Engineer Supervisor, Facility Engineering and Science Section (FESS), Solid Waste Division (SWD), Department of Natural Resources & Parks (DNRP)

DS ST

FM: Subrina Tahsin, Engineer II, SWD, DNRP

RE: Cedar Hills Regional Landfill Environmental Monitoring Report for the First Quarter of 2022

The purpose of this memorandum is to transmit the latest quarterly environmental report for the Cedar Hills Regional Landfill (Landfill) for your review. This report includes environmental data collected from Jan 1st, 2022 through March 31st, 2022. The report contains groundwater monitoring results and evaluations as described in *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill (Dec, 2013)*, storm water quality requirements under the *Industrial Stormwater General Permit,* and a compilation of other environmental data collected from the Landfill.

Also included with this submittal is a copy of the Area 5 Top Deck Monitoring Report for the First Quarter of 2022. This report addresses the activities specified in "Determination Regarding Proposed Extended Use of Temporary Cover for Cedar Hills Landfill Area 5" memorandum dated December 19, 2006.

If you have any questions, please call Laura Belt at 206-477-5215 or me at 206-263-6921.

Enclosures

cc: Alan Noell, Ph.D., P.E., Solid Waste Program, Washington State Department of Ecology
Tim O'Connor LG, LHG, Hydrogeologist 3, Solid Waste Program, Washington State Department of Ecology
Yolanda Pon, Solid Waste Program Supervisor, Public Health - Seattle and King County (PHSKC)
Glynda Steiner, P.E., CCM, Deputy Division Director, Solid Waste Division (SWD), Department of Natural Resources & Parks (DNRP)
Theresa Thurlow, P.E., Engineer Manager, SWD, DNRP
Laura Belt, P.E., Engineer Supervisor, SWD, DNRP

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June 3, 2022

Alan Noell, Ph.D., P.E.
Solid Waste Program
Washington State Department of Ecology
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

RE: Cedar Hills Regional Landfill Environmental Quarterly Report for the First Quarter of 2022

Dear Mr. Noell:

The purpose of this letter is to transmit a copy of the Solid Waste Division's Environmental Monitoring Quarterly Report for the Cedar Hills Regional Landfill (Landfill). This report includes environmental data collected from Jan 1st, 2022 through March 31st, 2022. The report contains groundwater monitoring results and evaluations as described in *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill* (Dec, 2013), storm water quality requirements under the Industrial Stormwater General Permit, and a compilation of other environmental data collected from the Landfill.

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If you have any questions, please contact Laura Belt at 206-477-5215 or me at is 206-263-6921.

Sincerely,

DocuSigned by:
Subrina Tahsin
EF99840290E4443...

Subrina Tahsin
Engineer II

Enclosures

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Jeromeo Cruz, Environmental Scientist III, Environmental Health Division, Seattle-King County Department of Public Health (SKCDPH)
Glynda Steiner, P.E., CCM, Deputy Division Director, Solid Waste Division (SWD), Department of Natural Resources and Parks (DNRP)
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CEDAR HILLS REGIONAL LANDFILL QUARTERLY ENVIRONMENTAL MONITORING REPORT

First Quarter 2022

King County
Department of
Natural Resources and Parks
Solid Waste Division

Serving Community • Protecting Environment • Operating Excellence

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June 2022

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CHECKLIST FOR GROUNDWATER REPORTING
Municipal Solid Waste Landfills
WAC 173-351-415

Include a signed, completed copy of this checklist with each quarterly and annual report.

Quarterly groundwater reports shall be submitted to the jurisdictional health department and Ecology within 60 days of receipt of analytical data. Annual groundwater reports shall be submitted to the jurisdictional health department and Ecology by April 1 of each year.

1st ✓ 2nd 3rd 4th YEAR 2022	Reference (section, subsection)	Included in this report	Location – page # or appendix #
Quarterly Groundwater Reports*: 173-351-415 (2) plus the referenced section*			
Statistical calculations and summaries			
Descriptive statistics	420, (1)	☐	
Statistical tests	420, (2)	☒	3
Notification of statistical increase (if applicable)	420, (4)	☒	3
Notification of concentrations above Chapter 173-200 WAC criteria (if any)	430, (4)	☒	24,35
Static water level readings	415, (2)	☒	App B
Potentiometric surface elevation maps depicting flow direction	415, (2)	☒	App A
Flow rate – calculated	415, (2)	☒	App A
Cation-anion balances	430, (5a)	☒	26-31, 41
Explanation of greater than 5% (or 10%) difference if needed	430, (5a)	☐	
Trilinear diagrams	430, (5b)	☒	30, 31, 38, 39
Leachate analyses (if sampled and tested)	415, (2)	☒	App B
Data entered into EIM database (date entered:)	415, (3)	☐	
Complete copy of the lab report with chain of custody record.		☐	
Annual Groundwater Reports*: 173-351-415 (1)* **YEAR**			
Summary of statistical results and trends	415, (1)	☐	
Summary of groundwater flow rate and direction for the year	415, (1)	☐	
Copy of all potentiometric maps for the year	415, (1)	☐	
Summary geochemical evaluation	415, (1)	☐	
For Quarterly and Annual Reports			
Stamped by a licensed professional	RCW 18.220	☒	v

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Subrina Tahsin
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Signature of Report Author

June 03, 2022
Date

Cedar Hills Regional Landfill
Landfill

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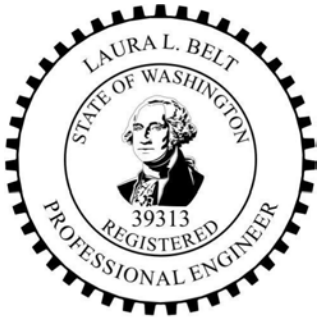
CERTIFICATION

Quarterly Report Groundwater Evaluation Report Certification

I certify in accordance with the requirements of WAC 173-351-400(c) (3), that the contents of this **Cedar Hills Regional Landfill Quarterly Environmental Monitoring Report** were prepared under my direction or supervision under a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Where applicable, some specific and related hydrogeologic portions have been duly certified by the responsible groundwater scientist. Based on my inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Name: Laura Belt, P.E.	**Title:** Supervising Engineer, Facility Engineering and Science Section	**Date:** June 03, 2022
Mailing Address: Solid Waste Division King County Department of Natural Resources & Parks 201 South Jackson Street, Suite 701 Seattle, WA 98104-3855		**Telephone Number:** 206-477-5215
Signature: DocuSigned by: Laura Belt 62EB1763091846C...		



EXPIRES 08/10/2023

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KING COUNTY CEDAR HILLS REGIONAL LANDFILL

SUMMARY OF QUARTERLY ENVIRONMENTAL MONITORING

FIRST QUARTER OF 2022

CONTENTS

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King County Cedar Hills Regional Landfill
Summary of Quarterly Environmental Monitoring
First Quarter of 2022

This summary discusses quarterly environmental monitoring results for groundwater, stormwater, and landfill gas migration monitoring for Cedar Hills Regional Landfill (CHRLF).

Environmental samples were collected and analyzed in accordance with the Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill (Dec., 2013), (SAP), and the Quality Assurance Project Plan for Environmental Monitoring at King County Solid Waste Facilities (QAPP). These plans describe procedures and activities to obtain sufficient and representative quality data to adequately conduct environmental monitoring at the CHRLF and provide documentation.

1.0 Quarterly Results and Analysis

This Section discusses the current monitoring results and how they compare to previous results from samples collected at CHRLF.

1.1 Groundwater

Groundwater monitoring well details, locations, and monitoring status are presented in Table 1 and Figure 1. Monitoring activities for the first quarter are listed in Table 2.

1.1.1 Regional Aquifer

A refined conceptual model was developed in the *Cedar Hills Regional Landfill Site Wide Hydrogeologic Report Addendum (Dec., 2013).* The model fits the site into its regional context of recharge and discharge, provides a detailed look at flow paths within the Regional Aquifer, and defines specific detection zones for each monitoring well. The model provides a thorough evaluation of the monitoring well coverage from the facility waste placement areas and indicates that CHRLF has a sufficient and effective monitoring well network in place. In addition, an alternate groundwater sampling frequency has been implemented for detection groundwater monitoring consistent with WAC 173-351-450 (see SAP, Table 1 and Figure 1).

Regional Aquifer analysis results for downgradient and crossgradient wells for this quarter are generally consistent with past results. Several upgradient wells continue to show elevated concentrations of several parameters; however, these parameters remain below regulatory standards and in general exhibit stability.

Groundwater elevations and potentiometric surfaces are within historical ranges and reflect seasonal responses to precipitation. The Potentiometric Surface Map and Groundwater Flow Analysis Report can be found in Appendix A. Elevations measured this quarter conform to the current hydrogeologic model.

Groundwater samples were analyzed for both dissolved and total metal fractions. However, only total metals results (per WAC 173-351-430(2)(b)(ii)) were compared to primary groundwater and drinking water quality standards, as listed in WAC 173-351-990 Appendix I and Title 40 CFR Subpart G Part 141. Dissolved iron and manganese were compared to secondary groundwater quality standards, as listed in WAC 173-351-990 Appendix II. Implementation of the most recent SAP resulted in a reduction in the total number of wells that are monitored. The remaining wells to be monitored were designated either as quarterly (all quarters of the year), or as semi-annual (second and fourth quarters of the year). This quarter, wells designated for quarterly monitoring were sampled, and are listed in Table 1.

Analytical Results

Analytical results can be viewed in Appendix B: Field and Analytical Test Results, and a discussion of groundwater criteria exceedances is below.

Exceedances of the Primary Ground Water Quality Criteria were observed for total arsenic as listed below:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-59, MW-66, MW-68*, MW-81, MW-83, MW-84, MW-93, MW-94, MW-113, MW-114, MW-115	MW-72, MW-74R, MW-75, MW-80, MW-85, MW-86, MW-87*

*Also exceeded Primary Federal Ground Water Quality Criteria

Exceedances of the Secondary Ground Water Quality Criteria were observed for dissolved iron as listed below:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-59, MW-68, MW-113	MW-72, MW-75, MW-80, MW-87

Exceedances of the Secondary Ground Water Quality Criteria were observed for dissolved manganese as listed below:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-59, MW-68, MW-93, MW-113	MW-72, MW-75, MW-80, MW-87

Exceedances of the Primary Ground Water Quality Criteria were observed for Trichloroethene as listed below:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-114*, MW-115*	--

*Also exceeded Primary Federal Ground Water Quality Criteria.

Primary and secondary exceedances of regulatory standards are tabulated and presented in Table 3.

Trilinear Diagrams and Ion Balance

Trilinear Diagrams (Figures 5 and 6) indicate water quality type (hydrochemical facie) based on the dissolved ion distribution. The diagrams are useful to recognize spatial and temporal variability, potential analytical error, or change in hydrochemical facie. All regional samples are within the calcium-magnesium-bicarbonate hydrochemical facie. Data are consistent with previous quarters. Ion balance calculations (Table 4) indicate no analytical error (> 10%) in any regional wells.

Prediction Limits

Intra-well upper prediction limits (UPLs) are calculated annually and have been updated with data collected through the end of 2021. Calculated prediction limits and analytical results for Appendix I parameters are presented in Table 5 and summarized below. Newly installed Monitoring wells MW-113 through MW-115 do not yet have enough background data from sampling events to calculate prediction limits for analytical parameters.

	Upgradient and Cross-gradient	Downgradient
Quarterly Sampled Wells	MW-59 (cis-1,2-Dichloroethene), MW-84 (total Barium), MW-93 (total Arsenic), MW-74R (Nitrate as N), MW-86 (total Copper), MW-87 (total Antimony, total Arsenic, total Barium, total Beryllium, total Chromium, total Copper, total Lead, total Selenium, total Vanadium, total Zinc)	MW-47 (total Cobalt, total Selenium), MW-101 (total Selenium)

Monitoring well MW-75, MW-85 (total Barium) passed the retesting protocol after a 1-of-3 UPL exceedances in 4Q21.

Monitoring wells MW-84 (total Barium), MW-93 (total Arsenic), MW-86 (total Copper) had 2-of-3 UPL exceedances in 1Q22.

A well redevelopment work order is being planned for the second quarter of 2022 for a group of wells based on field observations and data analytics. MW-87 had been resampled in second quarter of 2022 where the field sampling showed an orange, opaque water after initial purging and data analytics showed presence of suspended solids.

Volatile Detections

Volatile Organic Compound (VOC) detections in upgradient and cross-gradient regional aquifer wells this quarter are presented in Table 6. There continue to be regularly occurring detections of chlorinated solvents and their breakdown products within the monitoring network at CHRLF, all of which are associated with the upgradient Queen City Farms (QCF) Superfund site. These detections include the following:

- Cis-1,2-Dicholoroethene was detected in quarterly monitored well MW-59;
- Trichloroethene (TCE) was detected in quarterly monitored wells MW-83, MW-94 and the newly installed wells MW-114 and 115.

These upgradient and cross-gradient well detections are consistent with past data including the recently installed wells (MW-114 and MW-115) and continuing migration from QCF.

No other volatile detections occurred this quarter in regional monitoring wells.

1.1.2 Perched Zones

The East Perched Zone (EPZ) is a series of localized areas east of the Main Hill exhibiting shallow subsurface saturation that appears laterally and vertically discontinuous, predominantly within till and lacustrine silts.

The South Solid Waste Area (SSWA) Perched Zone contains perched groundwater that occurs both within pockets of variable surficial deposits comprised of local alluvium, recessional outwash, and/or weathered till (shallow perched zone), and within melt-out deposits in an overall predominately lodgment till sequence (deeper perched zone).

Groundwater elevations measured during the quarter in the Perched Zones are within historical ranges. Samples were collected from sixteen EPZ monitoring wells (MW-30A, MW-47, MW-50, MW-62, MW-64, MW-102, MW-103, MW-104, MW-105, MW-107, MW-108, MW-109, MW-110, MW-111, MW-112, MW-EB6). MW-101, which monitors the SSWA Perched Zone, was also sampled. Groundwater quality data from perched zones wells collected during the first quarter of 2022 are consistent with previous samples.

MW-105

MW-105 was installed on the south side of the east leachate lagoon to have a monitoring well in the shallowest perched groundwater zone to provide early leak detection. If specific conductance shows a statistically significant increasing trend or exceeds 500 µmhos/cm specific conductance (whichever condition is triggered first), then additional sampling (per the SAP) will be conducted and results assessed with respect to potential leakage from the lagoon.

This quarter, the conductivity at MW-105 was field measured at 186.9 µmhos/cm.

Analytical Results

Exceedances of regulatory standards for the perched zone wells are tabulated and presented in Table 7. All exceedances are consistent with past analyses and known impacts. MW-101, MW-109 and MW-110 exceeded Primary Federal Ground Water Quality Criteria for arsenic for multiple consecutive quarters; MW-108, MW-109, MW-110 and MW-112 exceeded Primary Federal Ground Water Quality Criteria for total Sodium for multiple quarters; MW-47 exceeded Primary Federal Ground Water Quality Criteria for Vinyl Chloride. Exceedances for EPZ replacement monitoring wells MW-102 through MW-104 and MW-107 through MW-112 are also included in Table 7.

Trilinear Diagrams and Ion Balance

Trilinear plots for Perched Zone samples are all within the calcium-magnesium-bicarbonate hydrochemical facie, consistent with past samples (Figures 7 and 8). Ion balance calculations (Table 8) indicate no analytical error (> 10%) in any perched wells. EPZ replacement monitoring wells MW-102 through MW-104 and MW-107 to MW-112 have been added in Figure 7. Ion balance calculations (Table 8) indicate no analytical error (> 10%) in any perched wells.

Prediction Limits

As with the regional aquifer monitoring wells, perched zone prediction limits are derived from cumulative data through the end of 2020. Calculated prediction limits for Appendix I parameters along with analytical results are presented in Table 9.

No UPL exceedances occurred for Perched Zone wells in the first quarter of 2022. Monitoring wells MW-107 through MW-112 now have enough background data from sampling events to calculate prediction limits for analytical parameters. This prediction limit will be calculated for the next quarterly report.

Volatile Detections

VOC detections in the perched zones are presented in Table 10. Multiple detections listed in the table are due to switching to Lower Limit of Quantitation (LLOQ) methodology, which lowered the detection limit for a variety of VOCs. Few detections are qualified 'JT' in Table 10. Qualifier 'JT' indicates sample result present but unquantified or in other words above the method detection limit (MDL) but below the Reporting Detection Limit (RDL).

All other analytes are consistent with past analyses and known impacts.

1.2 Stormwater

1.2.1 CHRLF ISGP

CHRLF stormwater discharge is authorized by an Industrial Stormwater General Permit (ISGP) issued by the Washington State Department of Ecology (Ecology). The permit defines discharge benchmarks, applicable to all facilities, and effluent limits, applicable specifically to landfills. These values are listed in Table 15. Sampling stations SW-N4, SW-SL3 and SW-GS1 (see Figure 2) are the designated points for comparison to permit benchmarks and effluent limits.

ISGP required monitoring activities for the first quarter of 2022 are listed in Table 12. There were no effluent limit exceedances at any sampling locations during the first quarter of 2022 (see Table 14). ISGP Discharge Monitoring Reports (DMRs) are included in Appendix B.

1.2.2 CHRLF CSWGP

Beginning in 2017, a Construction Stormwater General Permit (CSWGP) was issued for CHRLF (permit number WAR305034 with Ecology) for the Area 8 construction activities. A separate Stormwater Pollution Prevention Plan (SWPPP) was also created for this CSWGP permit. Four (4) discharge locations were monitored weekly for compliance with the CSWGP in accordance with the SWPPP by the contractor during the active phase of the project. The construction contractor also inspected the required construction site Best Management Practices (BMPs) and the CSWGP monitoring locations daily during construction activities.

The four locations monitored are listed as follows:

1. C-1 (NW end of the site, downstream of the NW siltation pond);
2. C-2 (NE end of the site, downstream of the N stormwater pond);
3. C-3 (SE portion of the site, downstream of the S stormwater lagoon and upstream of the bioswale); and,
4. C-4/CHL (SW part of the site, downstream from the SW siltation pond).

In Spring 2022 the CSGP permit was fully transferred to the contractor, Goodfellow Bros., and KCSWD is no longer responsible for the permit. KCSWD submitted their last monthly DMR to Ecology for March 2021. The permit was transferred to Goodfellow in April 2021 and they have been preparing and submitting all DMRs since that time. However, KC SWD receives copies of their stormwater inspection and DMR reports and monitors their work to ensure compliance with the permit.

There were three exceedances at monitoring locations C1, C2 and C4 during the first quarter of 2022 (see Table 14). The SWPPP was reviewed following the turbidity exceedances; the SWPPP did not need to be updated. Maintenance was performed on the BMPs and turbidity measurements dropped to less than 25 NTUs. Copies of DMRs submitted to Ecology by Goodfellow can be provided upon request.

1.3 Landfill Gas

Compliance probes, interior probes, on-site buildings, and supplemental monitoring probe results and location maps are included in Appendix B.

1.3.1 Compliance Probe Network

A network of compliance probes is monitored for landfill gas (LFG) migration around the perimeter of the landfill. Probes are monitored by the LFG crew monthly to monitor system performance and quarterly for compliance. The location map for the compliance probes can be viewed in Figure 4 and in Appendix B. The monitoring results for the compliance probes during this quarter are located in Appendix B.

No methane exceedances were observed at any compliance probe during the first quarter of 2022.

1.3.2 Interior Probe Network

Additional probes on the landfill site, located interior to the compliance probes but outside of the waste footprint, are monitored monthly. These probes provide valuable information for optimizing the performance of the LFG collection system and help to prevent LFG migration. The location map and monitoring results for the interior probes during the first quarter of 2022 can be viewed in Appendix B.

1.3.3 On-Site Building Monitoring

As required by WAC 173-351-200, gas concentrations are monitored inside facility structures. Structures are monitored quarterly for methane. No detections of methane occurred this quarter. The location map and monitoring results for facility gas monitoring during the first quarter of 2022 are presented in Appendix B.

1.3.4 Supplemental Migration Monitoring

Detections above the regulatory limit in LFG probe GP-33C in September of 2011 prompted actions including monitoring frequency increase, operational adjustments to increase LFG recovery rates, off-site structure monitoring, and, preparation of a response plan. Operational review resulted in modifications to enhance extraction from unlined areas and under liner spaces that could potentially act as gas conveyance pathways. The plan resulted in installation of thirteen (13) borings targeting the potential zone of LFG migration in the native sediments. Eight (8) borings serve as LFG extraction wells and five (5) borings as monitoring probes. The extraction wells and migration probes are monitored twice a month.

This quarter, methane was detected at levels above the detection limit at monitoring location MGPW-1708 (7.4%, 1.9% and 0.1% volume), MGPW-1700 (0.3% and 0.1% volume), MGPW 1710S (0.2% volume), MGPW 1710D (0.1% volume) and at MGPW 1714 (0.5% and 0.1% volume). These readings are used to inform adjustments to adjacent extraction wells. The location map and supplemental monitoring results are included in Appendix B. Review of historical data indicates the system has been effective in controlling LFG migration to the perimeter probes.

2.0 Analytical Methods

Groundwater quality is evaluated by comparison of analysis results to regulatory standards, geochemical analysis, and statistical evaluation. Water quality analytical results for stormwater runoff discharged from the landfill site are compared to the limits set in the ISGP and CSWGP. The following is a brief description of the standards and analytical tools used to review each matrix.

2.1 Regulatory Standards

Stormwater monitoring results are compared to the ISGP Benchmark and Effluent Limits Criteria and CSWGP Benchmarks (Table 13). Groundwater monitoring results are compared to the groundwater quality criteria in WAC 173-200 (Table 15).

2.2 Trilinear Diagrams and Major Ion Balance

Geochemical data are presented on trilinear diagrams. Major cations and anions are plotted on individual triangles as percentages of total milliequivalents per liter (meq/L). These diagrams illustrate differences in major ion chemistry between groundwater samples and can be used to categorize water composition into identifiable groups or hydrochemical facies. Hydrochemical facies reflect distinct compositions of cation and anion concentrations. The value of the diagram lies in pointing out relationships that exist among individual samples. Trilinear diagrams are included with ionic balance calculations in this report. Ion balance calculations are useful for determining analytical correctness and can be of value in detecting laboratory error or variation in field sampling procedures.

2.3 Prediction Limits

A prediction limit is a statistical test that compares an analytical result to a computed limit value. The limit value is derived from past analytical results, which are considered representative historical data. A value outside of this limiting value is considered evidence that the result is not drawn from the same sample population distribution.

To evaluate the groundwater data for CHRLF, one-sided UPLs are calculated based on intra-well comparisons. Intra-well comparisons present a more conservative approach to determining if a statistically significant release has occurred and is recommended for evaluation of detection monitoring data. In the intra-well approach, a threshold background value is set by determining an UPL. Prediction limits set a comparison threshold for background data with compliance well data and are used to determine if a sample is statistically elevated above background conditions. UPLs for the subsequent year's detection monitoring are calculated at the end of each year and incorporate the previous year's analytical results. UPLs are based on a 0.05 significance level, as approved by Ecology to be protective of human health and the environment. A 0.05 significance level indicates that at most there is a five (5) percent chance that a Type I error (false positive) will occur in the results.

The method for calculating the UPLs depends on both the type of distribution and the number of non-detects present in the background data set. UPLs for background data sets with 100 percent non-detects (NDs) are equal to the highest laboratory MDL. UPLs for

background data sets with greater than 50 percent, but less than 100 percent non-detects are calculated based on the highest detected concentration for the respective data set.

Note: Although there are alternative methods for calculating UPLs for background data sets with greater than 90 percent, but less than 100 percent non-detects (e.g., Poisson's Method), the use of the highest detected concentration is generally considered the most conservative.

UPLs for background data sets with less than 50 percent non-detects are evaluated for normality. UPLs with non-parametric data sets are based on the highest detected concentration for the respective data set. UPLs for either normally distributed or transformed-normal data sets are calculated based on the following equations for calculating parametric prediction limits with retesting (*EPA Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance*, *2009*):

Normal Distribution

$$UPL = x + \kappa s$$

or

Transformed Distribution:

$$UPL = y + \kappa s_y$$

where: x = mean of the baseline data
y = mean of the transformed data
κ = multiplier for intra-well prediction limits
s = standard deviation of baseline data
s_y = standard deviation of transformed data

For UPLs of constituents that had only ever had non-detects prior to implementing the LLOQ and are now detected, the MDL is being used until sufficient data is available to calculate at UPL.

Analytical results are compared to the respective UPLs on a quarterly/semi-annual basis, depending on the monitoring program, for Appendix I parameters. If there is an exceedance of the UPL, retesting of that analytical parameter at the respective location is required to determine if the exceedance represents a statistically significant increase over background.

A 1-of-3 retesting plan is used for any exceedances of the intra-well UPLs at CHRLF. This retesting plan provides adequate statistical power and minimizes Type II (False Negative) errors, while providing retesting that accommodates lab turnaround time, data review, and scheduling. This test is performed on parameters in WAC 173-351-990 Appendix I and is used to detect a change in the population distribution of the individual well.

2.4 Laboratory Data Quality

Laboratory analytical data is reviewed to verify meeting data quality objectives (DQOs) as defined in the QAPP. Occasionally, results identified during this process are deemed unsuitable for evaluation purposes. A summary of suspect results can be found in Table 16.

2.4.1 Lower Limit of Quantification

Changes made in accordance with federal regulations for the guidance of analytical testing methodologies covered by SW-846 (Test Methods for Evaluating Solid Waste) were implemented in 2017 by the contract laboratory. One specific effect of these changes was to replace the MDL methodology with the LLOQ methodology as the basis for determining the lowest quantitative value of an analyte that can be reported. This affected all methods covered within SW-846.

The LLOQ is a performance-based methodology that tests known standards repeatedly to create a calibration curve for a specific method. Commonly, the lowest concentration of the (linear) calibration curve is set as the LLOQ. However, in some cases the LLOQ may be greater than the baseline curve concentration due to lab specific factors such as instrument sensitivity and method analytical uncertainty.

2.4.2 Analytical Uncertainty and Data Review

An important consideration when reviewing and evaluating analytical data is to examine the uncertainty associated with the measurement of each analyte. When a UPL or groundwater quality criteria exceedance, and the detection limit are similar in magnitude, uncertainty inherent in low level concentration results can call into question the actuality of both presence and/or exceedance of the limit or criteria. This uncertainty is partly due to the 'noise' that is intrinsic in analytical testing methods and laboratory protocol. Arsenic exceedances in groundwater provide an example of this scenario, as the UPL and detection limits for arsenic are both typically quite low (parts per billion), as is the groundwater quality criteria. This results in the analytical measurement being evaluated to be subject to both the uncertainty within the calculation of a UPL, and the 'noise' of the analytical testing method, which includes both method and laboratory specific elements. These factors must be considered when performing a review or statistical evaluation of analytical data before confirmation on a UPL or groundwater quality exceedance can be determined.

3. References

1) *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill*, December 2013 (SAP). King county, Department of Natural Resources and Parks, Solid Waste Division, prepared by Aspect Consulting LLC.
2) *Cedar Hills Regional Landfill Site Wide Hydrogeologic Report* Addendum, December 2013, King County, Department of Natural Resources and Parks, Solid Waste Division, prepared by Aspect Consulting LLC.

3) Hills Regional Landfill – EPZ Extraction Well Decommissioning Technical Memorandum, Phase 1 – Cedar Hills Regional Landfill, CONTRACT NO. E00286E12, Task No. 810, July 2018.
4) Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance, EPA, 2009.

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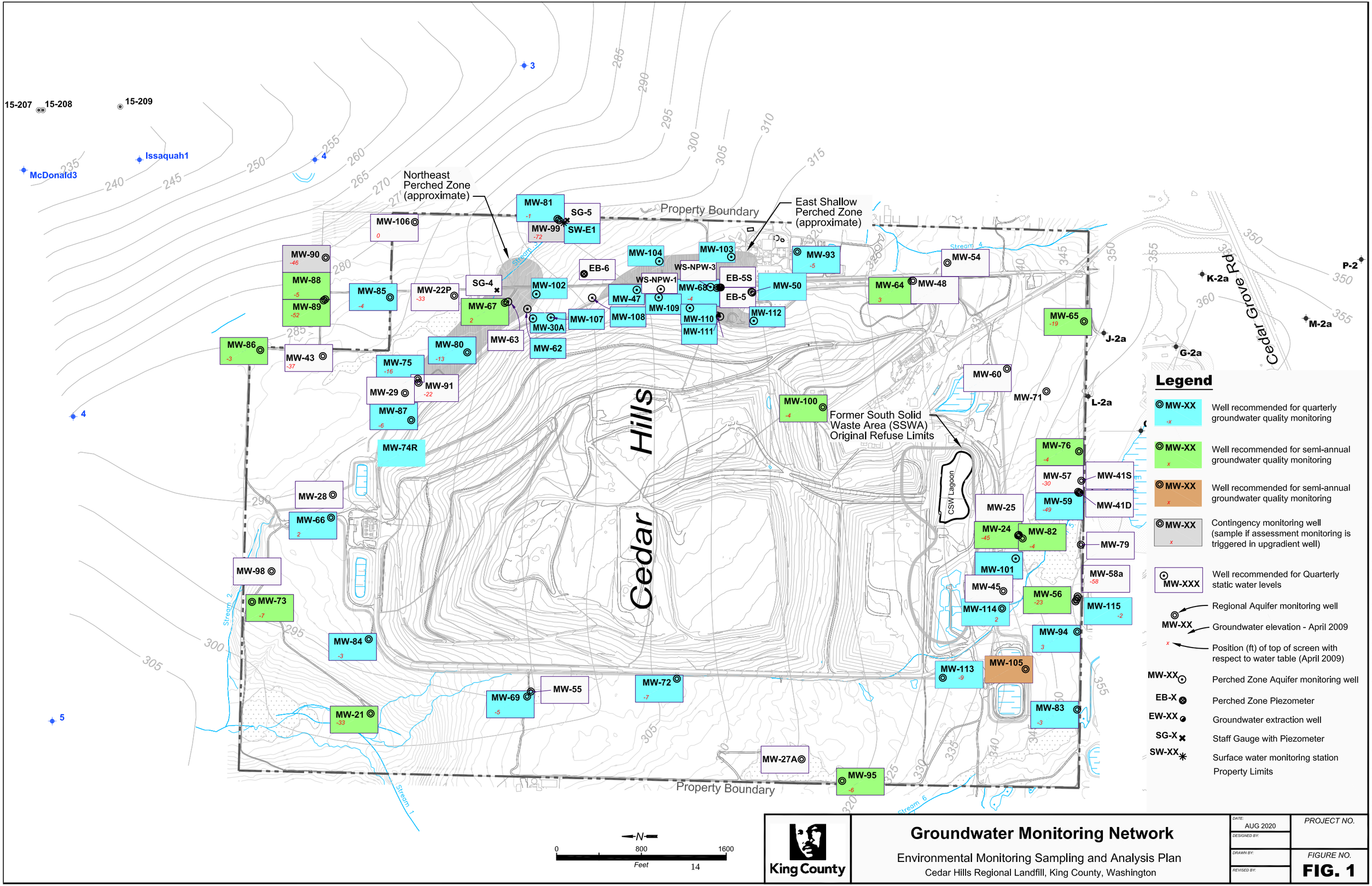

Legend

- MW-XX -x — Well recommended for quarterly groundwater quality monitoring
- MW-XX x — Well recommended for semi-annual groundwater quality monitoring
- MW-XX x — Well recommended for semi-annual groundwater quality monitoring
- MW-XX x — Contingency monitoring well (sample if assessment monitoring is triggered in upgradient well)
- MW-XXX — Well recommended for Quarterly static water levels
- MW-XX — Regional Aquifer monitoring well
- MW-XX — Groundwater elevation - April 2009
- x — Position (ft) of top of screen with respect to water table (April 2009)
- MW-XX — Perched Zone Aquifer monitoring well
- EB-X — Perched Zone Piezometer
- EW-XX — Groundwater extraction well
- SG-X — Staff Gauge with Piezometer
- SW-XX — Surface water monitoring station
- Property Limits

N

0 800 1600
Feet

14

King County

Groundwater Monitoring Network

Environmental Monitoring Sampling and Analysis Plan
Cedar Hills Regional Landfill, King County, Washington

DATE: AUG 2020
DESIGNED BY:
DRAWN BY:
REVISED BY:
PROJECT NO.
FIGURE NO. FIG. 1

CAD Path: S:\CAD\CEDARHIL\CH Monitoring well and GP for CLEE quarterly Aug 2020\Fig 7.1 - Fig 1 Fig 1 GW Monitoring Network Aug 2020 2 change background map.dwg Figure 7.1 (11 x 17) || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jan 14, 2021 4:13pm User: uedag

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Property Boundary

PIPELINE

Cedar Hills

Cedar Grove Rd

Stream 1

Stream 2

Stream 3

Stream 4

Stream 6

CSW Lagoon

Queen City Lake

LFPI Decommissioned

Meteorological Station Location

SW-SV

SW-N4

SW-N1

SW-W1

SW-W2

SW-S1

SW-S2

SW-S3

SW-SL3

SW-PF

SW-E1

SW-GS1

SG-1

SG-2

SG-3

SG-4

SG-5

SG-6

SG-7

SG-8

SG-9

Legend

- SW-GS1 ✳ Primary Surface Water and Stormwater Monitoring Locations
- SW-S1 ✳ Contingency Surface Water Monitoring Locations
- SG-8 ✳ Staff Gage Locations
- Meteorological Station Location
- Property Limits

N

0 800 1600

Feet

King County

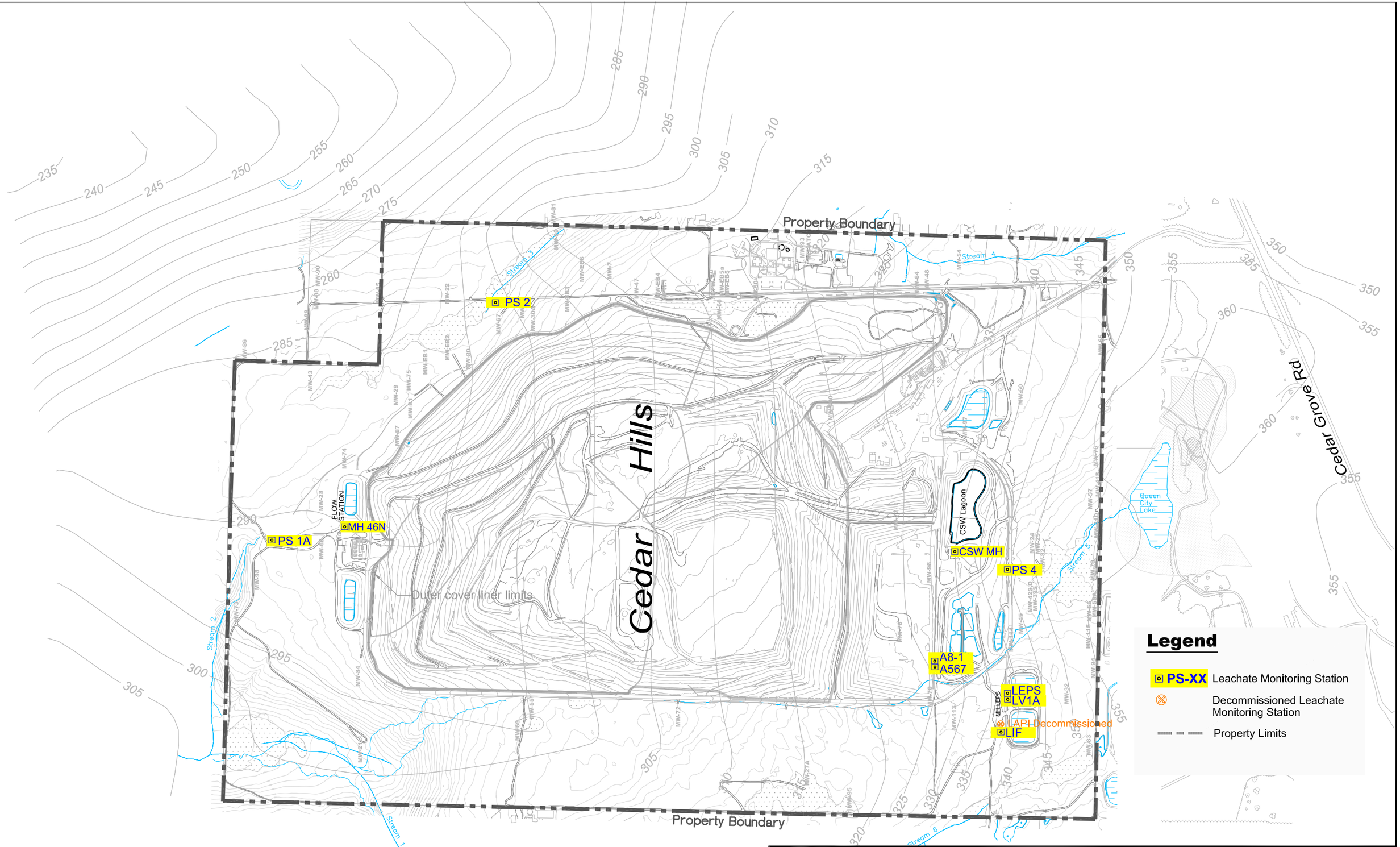
Surface Water and Storm Monitoring Network

Environmental Monitoring Sampling and Analysis Plan

Cedar Hills Regional Landfill, King County, Washington

DATE: AUG 2020	PROJECT NO.
DESIGNED BY:	
DRAWN BY:	FIGURE NO.
REVISED BY:	FIG. 2

CAD Path: S:\CAD\CEDARHIL\CH Monitoring well and GP for CLEE quarterly Aug 2020\Fig 2\Fig 2 Surface water and stormwater monitoring network.dwg Figure 7.1 (11 x 17) || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jan 14, 2021 9:16am || User:



KClogo_v_b_m2[1].tif

Leachate Monitoring Locations

Environmental Monitoring Sampling and Analysis Plan

Cedar Hills Regional Landfill, King County, Washington

DATE: AUG 2020

DESIGNED BY:

DRAWN BY:

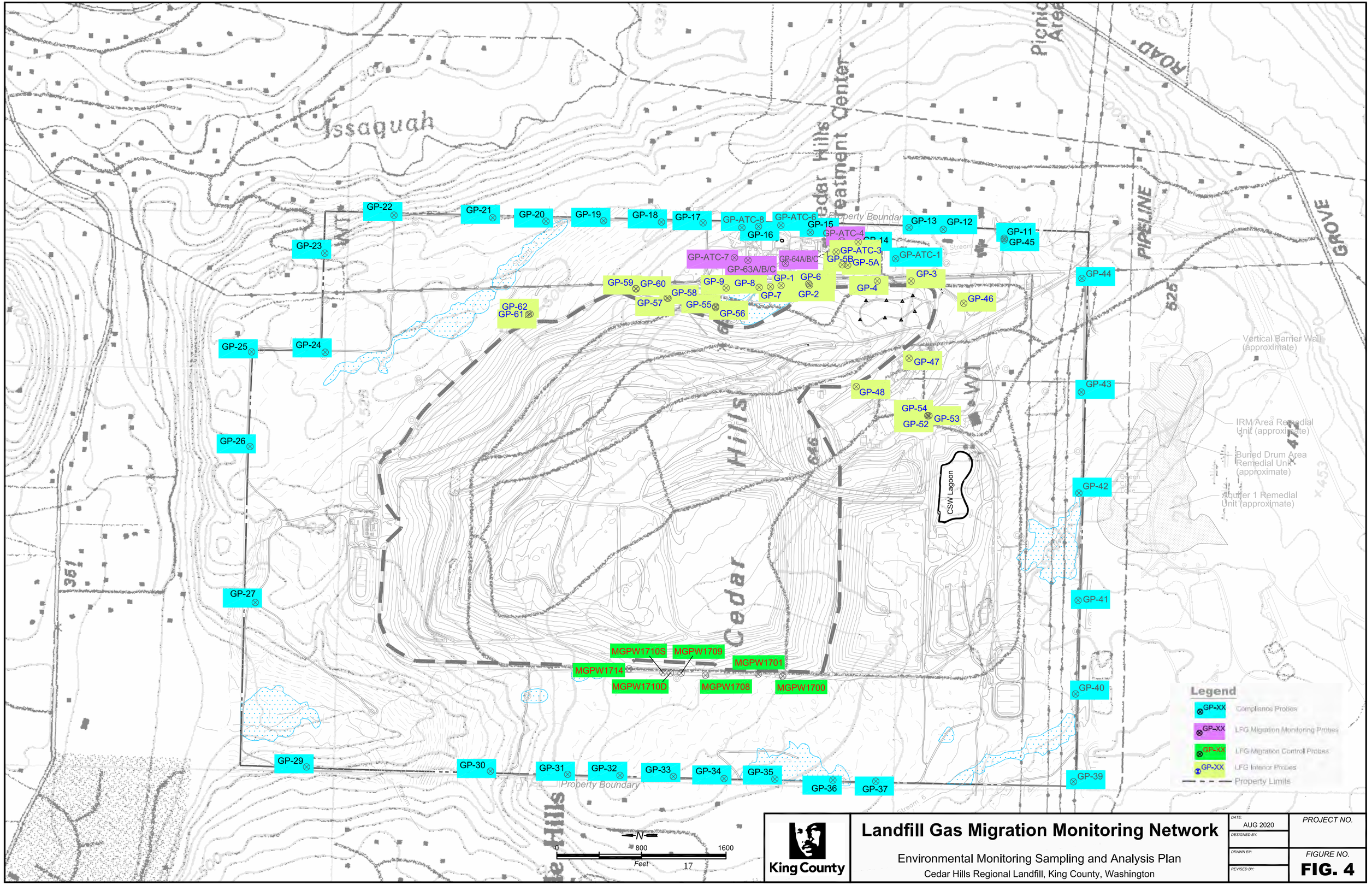
REVISED BY:

PROJECT NO.

FIGURE NO.

FIG. 3

CAD Path: S:\CAD\CEDARHILL\CH Monitoring well and GP for CLEE quarterly Aug 2020\Fig 3\Fig 3 Leachate map rev 12-21-20.dwg Figure 7.1 (11 x 17) || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jan 14, 2021 4:21pm || User: uedag



King County

Landfill Gas Migration Monitoring Network

Environmental Monitoring Sampling and Analysis Plan

Cedar Hills Regional Landfill, King County, Washington

DATE: AUG 2020	PROJECT NO.
DESIGNED BY:	
DRAWN BY:	FIGURE NO.
REVISED BY:	**FIG. 4**

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Table 1
CEDAR HILLS REGIONAL LANDFILL: GROUNDWATER MONITORING WELLS

Well Name	General Condition				Recommendations				
	Well Diameter (inches)	Well Depth (feet)	Installation Date	Water Table or Deep Zone	Well Monitoring Classification	Comments on Well Use	Static Water Level Monitoring Frequency	Water Quality Monitoring Frequency	Rationale
MW-21 (Upgradient)	6	163	5/17/83	Deep	Detection	Background	Quarterly	Semi-annual	Monitors background conditions of deep aquifer.
MW-22P (Downgradient)	2	284	5/25/83	Deep	Detection	WL only	Quarterly	None	Not effectively located for facilities or background monitoring.
MW-24 (Upgradient)	6	192	6/2/83	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in deep upgradient well. Monitor SWLs to define deeper Regional Aquifer flow paths.
MW 43 (Downgradient)	5	325	30/4/85	Deep	Detection	WL only	Quarterly	None	
MW-54 (Upgradient)	2	351	9/26/86	Deep	Detection	WL only	Quarterly	None	Not effectively located for facilities monitoring as it lies up gradient of the CHRLF facilities. Upgradient water quality monitored in other wells.
MW-56 (Upgradient)	2	166	10/12/88	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in upgradient well. Low groundwater velocities indicate slow movement of QCF contaminants through this area
MW-57 (Upgradient)	2	144	8/22/88	Deep	Detection	WL only	Quarterly	None	Monitoring redundant with MW-59. Strong downward vertical gradients indicate impacts at MW-57 would also be detected at MW-59.
MW-58A (Upgradient)	2	219	9/26/88	Deep	Detection	WL only	Quarterly	None	Monitoring redundant with MW-56. Strong downward vertical gradients indicate impacts at MW-58A would also be detected at MW-56.
MW-59 (Upgradient)	2	180.5	8/16/88	Deep	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in upgradient well.
MW-60 (Upgradient)	2.5	240	9/13/91	Water Table	Detection	WL only	Quarterly	None	Upgradient flow from QCF in shallow Regional Aquifer characterized by MW-65 and MW-76. Downgradient area monitored by MW-100
MW-64 (Upgradient)	2.5	274	3/22/93	Water Table	Detection		Quarterly	Semi-annual	Adjacent to SE Pit. Conversion from quarterly to semiannual sampling does not have
MW-65 (Upgradient)	2.5	234	3/29/93	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in upgradient well. Monitor SWLs to define deeper Regional Aquifer flow paths.
MW-66 (Upgradient)	2.5	248	4/5/93	Water Table	Detection		Quarterly	Quarterly	Monitor north end leachate detention facilities.
MW-67 (Downgradient)	2.5	230	4/28/93	Water Table	Detection		Quarterly	Semi-annual	Monitors potential EPZ contaminants infiltrating into Regional Aquifer.
MW-68 (Cross-Gradient/ Downgradient)	2.5	353	4/15/93	Water Table	Detection		Quarterly	Quarterly	Well is completed adjacent to unlined Main Hill where downward flow from Main Hill and impacted EPZ would be captured. Monitors Main Hill gas effected area.
MW-69 (Downgradient)	2.5	371	4/23/93	Water Table	Detection	WL only	Quarterly	Quarterly	West side flow converges in this area and well is upgradient of key downgradient wells.
MW-72 (Downgradient)	2.5	376	8/7/98	Water Table	Detection		Quarterly	Quarterly	Key water quality monitoring well for southwest landfill area.
MW-73 (Upgradient)	4	206	9/3/99	Water Table	Detection	Background	Quarterly	Semi-annual	Background water quality monitoring for northwest facility area. Downgradient flow paths from well largely by-pass facility so provides
MW-74R (Downgradient)	4	249	11/1/00	Water Table	Detection		Quarterly	Quarterly	Detection zone monitors north end facilities. Quarterly monitoring recommended due to
MW-75 (Downgradient)	4	269	9/24/99	Deep	Detection		Quarterly	Quarterly	Key downgradient monitoring well.
MW-76 (Upgradient)	4	148	10/25/99	Water Table	Detection	Background	Quarterly	Semi-annual	Monitor QCF impacts effecting upgradient water quality in shallow portio of Regional Aquifer. Low groundwater velocities (0.014 ft/day) indicate slow movement of QC
MW-80 (Downgradient)	4	259	2/27/01	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well for monitoring impacts from unlined Main Hill and EPZ.
MW-81 (Upgradient)	4	192	10/3/02	Water Table	Detection		Quarterly	Quarterly	Monitors GW quality from off-site area east of facility. Retain as monitoring point for potential LFG impacts to GW. Key well for defining
MW-82 (Upgradient)	4	133	11/2/00	Water Table	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in shallow Regional upgradient well. Low groundwater velocities indicate slow movement of QCF
MW-83 (Upgradient)	4	154	10/27/00	Water Table	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in shallow Regional upgradient well.
MW-84 (Upgradient)	4	246	10/20/00	Water Table	Detection	Background	Quarterly	Quarterly	Monitor background conditions in shallow regional aquifer
MW-85 (Downgradient)	4	257	12/1/00	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well with large detection zone underlying waste placement areas. Located in area of convergent GW flow and near center of high transmissivity channel
MW-86 (Downgradient)	4	259	12/12/00	Water Table	Detection		Quarterly	Semi-annual	Provides monitoring of north end facilities. Conversion from quarterly to semiannual sampling does not have significant effect on intrawell statistics.

Table 1
CEDAR HILLS REGIONAL LANDFILL: GROUNDWATER MONITORING WELLS

Well Name	General Condition				Recommendations				
	Well Diameter (inches)	Well Depth (feet)	Installation Date	Water Table or Deep Zone	Well Monitoring Classification	Comments on Well Use	Static Water Level Monitoring Frequency	Water Quality Monitoring Frequency	Rationale
MW-87 (Downgradient)	4	261	11/21/00	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well.
MW-88 (Downgradient)	4	239	9/13/01	Water Table	Detection		Quarterly	Semi-annual	Provides limited monitoring of north end facilities. Conversion from quarterly to semiannual sampling does not have significant effect on intrawell statistics.
MW-89 (Downgradient)	4	291	11/12/01	Deep	Detection		Quarterly	Semi-annual	Provides limited monitoring of north end facilities in deep Regional Aquifer. Continue monitoring in place of MW-43.
MW-90 (Downgradient)	4	274	8/14/02	Deep	Assessment		Quarterly	Contingent	Water quality monitoring redundant with MW-89. Reserve as contingency well in event assessment monitoring is triggered in MW-88,89 or 85.
MW-91 (Downgradient)	6	289	10/26/01	Deep	Detection	WL only	Quarterly	None	Large diameter well used for testing. Redundant with well MW-75.
MW-93 (Cross Gradient)	4	320	6/24/02	Water Table	Detection		Quarterly	Quarterly	Well monitors the Main Hill gas affected area.
MW-94 (Upgradient)	4	145	7/2/02	Water Table	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in shallow Regional upgradient well.
MW-95 (Cross Gradient)	4	263	7/22/02	Water Table	Detection		Quarterly	Semi-annual	Monitor off-site water quality at southwest end of facility. Downgradient flow paths poorly defined and may by-pass facility.
MW-99 (Upgradient)	4	279	8/30/02	Deep	Assessment		Quarterly	Contingent	Monitors easterly upgradient water quality from offsite. Reserve as contingency well in event assessment monitoring is triggered in MW-81.
MW-100 (Downgradient)	4	300	8/26/02	Water Table	Detection		Quarterly	Semi-annual	Well useful for flowpath and geochemical modeling. Assists in tracking QCF contaminant migration through facility.
MW-106 (Cross gradient)	4	203	2/19/09	Water Table	Detection	WL only	Quarterly	None	Defines east side flow paths.
MW-113 (Upgradient)	4	220	4/03/20	Water Table	Detection		Quarterly	Quarterly	New monitoring well as of 2nd quarter 2020
MW-114 (Upgradient)	4	150	4/10/20	Water Table	Detection	Background	Quarterly	Quarterly	New monitoring well as of 2nd quarter 2020
MW-115 (Upgradient)	4	145	4/14/20	Water Table	Detection	Background	Quarterly	Quarterly	New monitoring well as of 2nd quarter 2020
NPW1	8	382	8/221990	Deep	Non-Potable	WL only	Quarterly	None	Well provides non potable water to the fire supression tank on-site
NPW3	6	376	6/51990	Deep	Non-Potable	WL only	Quarterly	None	Well provides non potable water to the fire supression tank on-site
East Main Hill Perched Zones									
EB-5	2	60	5/06/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.
EB-5S	2	20	6/06/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.
EB-6	2	30	11/28/90	EPZ	Assessment		Quarterly	Quarterly	Monitor water levels to evaluate affect of extraction system shut down. Well has limited water yield limiting ability to collect samples.
EW-25	6	36	6/10/92	EPZ	Assessment		Quarterly	Quarterly	Key EPZ compliance well. Temporary monitoring point sampled with passive diffusion sampler. Decommissioned 2nd quarter of 2018.
MW 25	3	43	3/6/83	EPZ	Assessment	WL only	Quarterly	None	
MW 27A	2	80	3/10/85	EPZ	Assessment	WL only	Quarterly	None	
MW 28	3	39	21/6/83	EPZ	Assessment	WL only	Quarterly	None	
MW 29	3	60	23/6/83	EPZ	Assessment	WL only	Quarterly	None	
MW-30A	3	35	6/09/89	EPZ	Assessment		Quarterly	Quarterly	Monitor attenuating VOCs.
MW-41S	3	51	12/7/83	EPZ	Assessment	WL only	Quarterly	None	
MW-41D	3	51	12/7/83	EPZ	Assessment	WL only	Quarterly		
MW 45	2	64	5/17/1985	EPZ	Assessment	WL only	Quarterly	None	
MW-47	2	44	5/31/85	EPZ	Assessment		Quarterly	Quarterly	Key EPZ compliance well.

Table 1
CEDAR HILLS REGIONAL LANDFILL: GROUNDWATER MONITORING WELLS

Well Name	General Condition				Recommendations				
	Well Diameter (inches)	Well Depth (feet)	Installation Date	Water Table or Deep Zone	Well Monitoring Classification	Comments on Well Use	Static Water Level Monitoring Frequency	Water Quality Monitoring Frequency	Rationale
MW 48	2	63	24/5/85	EPZ	Assessment	WL only	Quarterly	None	
MW-50	2	40	6/03/85	EPZ	Assessment		Quarterly	Quarterly	
MW 55	2	67	10/02/86	EPZ	Assessment	WL only	Quarterly	None	
MW-62	2	54	1/02/90	EPZ	Assessment		Quarterly	Quarterly	Monitor attenuating VOCs.
MW-63	2	17	12/02/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.
MW 79	2	56	11/05/99	EPZ	Assessment	WL only	Quarterly		THIS WELL IS BROKEN; needs to be fixed. No statics are taken since it is still broken.
MW 98	2	23	3/09/01	EPZ	Assessment	WL only	Quarterly	None	
MW-102	2	50	1/27/09	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-103	2	35	1/28/09	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-104	2	32	1/29/09	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-107	2	39	6/07/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-108	2	17	6/08/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-109	2	13	6/09/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-110	2	19	6/11/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-111	2	14	6/11/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-112	2	17	6/11/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
South Solid Waste Area Perched Zone									
MW-101	2	54	6/2/06	SSWA	Assessment		Quarterly	Quarterly	Key SSWA perched zone compliance well
MW 105	2	30	1/30/09	EPZ	Assessment	Conductance only	Quarterly	Quarterly	Well located near leachate lagoons; FE measures conductance every quarter on this well as a check of the leachate lagoons

Notes:
(1) The following wells were decommissioned: MW-70, MW-77, MW-78, MW-96, MW-97, and EW-25 as of 2019.
(2) Shallow wells are wells completed in the Regional Aquifer with the top screen slot within 10 ft of the water table. Deep wells are completed in the Regional Aquifer with the top screen slot greater than 10 ft below the water table.
(3) Water quality monitoring shading relates to Figure 2.
Abbreviations:
WL = Water Level
NA = Not Applicable
DZ = Detection Zone EPZ = East Perched Zone
SSWA = South Solid Waste Area QCF = Queen City Farms

TABLE 2

CEDAR HILLS REGIONAL LANDFILL:

GROUNDWATER MONITORING ACTIVITIES 1ST QUARTER 2022

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
Static Water Levels	NA	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	North half of landfill.
Static Water Levels	NA	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	South half of landfill.
MW-21	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	
MW-24	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	
MW-30A	Perched	1/5/22 12:00 AM	Groundwater Elevation Measurement	W30A220119-	
MW-30A	Perched	1/19/22 9:45 AM	Quarterly Groundwater Sampling	W30A220218-	
MW-47	Perched	1/5/22 12:00 AM	Groundwater Elevation Measurement	W47-220119-	
MW-47	Perched	1/19/22 9:25 AM	Quarterly Groundwater Sampling	W47-220218-	
MW-50	Perched	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	
MW-56	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	
MW-59	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	W59-220110-	
MW-59	Regional	1/10/22 12:20 PM	Groundwater Elevation Measurement	W59-220110-	
MW-62	Perched	1/5/22 12:00 AM	Groundwater Elevation Measurement	W62-220118-	
MW-62	Perched	1/18/22 9:12 AM	Quarterly Groundwater Sampling	W62-220118-	
MW-64	Perched	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	
MW-65	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	
MW-66	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	W66-220106-	
MW-66	Regional	1/6/22 10:35 AM	Quarterly Groundwater Sampling	W66-220106-	
MW-67	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	
MW-68	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	W68-220112-	
MW-68	Regional	1/12/22 11:00 AM	Quarterly Groundwater Sampling	W68-220112-	
MW-69	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement		
MW-72	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	W72-220107-	
MW-72	Regional	1/7/22 10:05 AM	Quarterly Groundwater Sampling	W72-220107-	
MW-73	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	--	
MW-74R	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	W74R220107-	
MW-74R	Regional	1/7/22 8:35 AM	Quarterly Groundwater Sampling	W74R220107-	
MW-75	Regional	1/5/22 12:00 AM	Groundwater Elevation Measurement	W75-220107-	
MW-75	Regional	1/7/22 10:05 AM	Quarterly Groundwater Sampling	W75-220107-	
MW-76	Regional	1/5/22	Groundwater Elevation Measurement	--	
MW-80	Regional	1/5/2022	Groundwater Elevation Measurement	W80-220112-	
MW-80	Regional	1/12/2022	Quarterly Groundwater Sampling	W80-220112-	
MW-81	Regional	1/5/22	Groundwater Elevation Measurement	W81-220106-	
MW-81	Regional	1/6/22	Quarterly Groundwater Sampling	W81-220106-	
MW-82	Regional	1/5/2022	Groundwater Elevation Measurement	--	
MW-83	Regional	1/5/22	Groundwater Elevation Measurement	W83-220110-	
MW-83	Regional	1/10/22	Quarterly Groundwater Sampling	W83-220110-	
MW-84	Regional	1/5/22	Groundwater Elevation Measurement	W84-220107-	
MW-84	Regional	1/7/2022	Quarterly Groundwater Sampling	W84-220107-	
MW-85	Regional	1/5/22	Groundwater Elevation Measurement	W85-220110-	
MW-85	Regional	1/10/22	Quarterly Groundwater Sampling	W85-220110-	
MW-86	Regional	1/5/2022	Groundwater Elevation Measurement	W86-220302R	
MW-86	Regional	3/2/22	Quarterly Groundwater Sampling	W86-220302R	

TABLE 2

CEDAR HILLS REGIONAL LANDFILL:

GROUNDWATER MONITORING ACTIVITIES 1ST QUARTER 2022

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-87	Regional	1/5/22	Groundwater Elevation Measurement	W87-220110-	
MW-87	Regional	1/10/22	Quarterly Groundwater Sampling	W87-220110-	
MW-88	Regional	1/5/2022	Groundwater Elevation Measurement	--	
MW-89	Regional	1/5/22	Groundwater Elevation Measurement	--	
MW-90	Regional	1/5/22	Groundwater Elevation Measurement	--	
MW-93	Regional	1/5/2022	Groundwater Elevation Measurement	W93-220110-	
MW-93	Regional	1/10/2022	Quarterly Groundwater Sampling	W93-220110-	
MW-94	Regional	1/5/22	Groundwater Elevation Measurement	W94-220110-	
MW-94	Regional	1/10/22	Groundwater Elevation Measurement	W94-220110-	
MW-95	Regional	1/5/2022	Groundwater Elevation Measurement	--	
MW-99	Regional	1/5/22	Groundwater Elevation Measurement	--	
MW-EB6	Perched	1/5/22	Groundwater Elevation Measurement	WEB6220111-	
MW-EB6	Perched	1/11/22	Quarterly Groundwater Sampling	WEB6220111-	
MW-100	Regional	1/5/2022	Groundwater Elevation Measurement		
MW-101	Perched	1/5/22	Groundwater Elevation Measurement	W101220119-	
MW-101	Perched	1/19/22	Quarterly Groundwater Sampling	W101220119-	
MW-102	Perched	1/5/2022	Groundwater Elevation Measurement	W102220118-	
MW-102	Perched	1/18/22	Quarterly Groundwater Sampling	W102220118-	
MW-103	Perched	1/5/22	Groundwater Elevation Measurement	W103220112-	
MW-103	Perched	1/12/22	Quarterly Groundwater Sampling	W103220112-	
MW-104	Perched	1/5/2022	Groundwater Elevation Measurement	--	
MW-105	Perched	1/5/22	Groundwater Elevation Measurement	--	
MW-107	Perched	1/5/22	Groundwater Elevation Measurement	W107220113-	
MW-107	Perched	1/13/2022	Quarterly Groundwater Sampling	W107220113-	
MW-108	Perched	1/5/2022	Groundwater Elevation Measurement	W108220114-	
MW-108	Perched	1/14/22	Quarterly Groundwater Sampling	W108220114-	
MW-109	Perched	1/5/22	Groundwater Elevation Measurement	W109220114-	
MW-109	Perched	1/14/2022	Quarterly Groundwater Sampling	W109220114-	
MW-110	Perched	1/5/22	Groundwater Elevation Measurement	W110220111-	
MW-110	Perched	1/11/22	Quarterly Groundwater Sampling	W110220111-	
MW-111	Perched	1/5/22	Groundwater Elevation Measurement	W111220113-	
MW-111	Perched	1/13/2022	Quarterly Groundwater Sampling	W111220113-	
MW-112	Perched	1/5/22	Groundwater Elevation Measurement	W112220118-	
MW-112	Perched	1/18/22	Quarterly Groundwater Sampling	W112220118-	
MW-113	Regional	1/5/2022	Groundwater Elevation Measurement	W113220110-	
MW-113	Regional	1/10/22	Quarterly Groundwater Sampling	W113220110-	
MW-114	Regional	1/5/22	Groundwater Elevation Measurement	W114220110-	
MW-114	Regional	1/10/22	Quarterly Groundwater Sampling	W114220110-	
MW-115	Regional	1/5/2022	Groundwater Elevation Measurement	W115220110-	
MW-115	Regional	1/10/22	Quarterly Groundwater Sampling	W115220110-	

Table 3
CEDAR HILLS REGIONAL LANDFILL:
REGIONAL AQUIFER GROUNDWATER QUALITY STANDARD EXCEEDANCES
(Data Collected from Jan 01, 2022 to March 31, 2022)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Upgradient and Crossgradient Wells					
pH (Field)	pH Units	MW-94	1/10/2022	W94-220110-	6.31
Arsenic, Total	mg/L	MW-113	1/10/2022	W113220110-	0.000628
		MW-114	1/10/2022	W114220110-	0.000291
		MW-115	1/10/2022	W115220110-	0.000174
		MW-59	1/10/2022	W59-220110-	0.000491
		MW-66	1/6/2022	W66-220106-	0.0008
		MW-68	1/12/2022	W68-220112-	0.0211
		MW-81	1/6/2022	W81-220106-	0.000583
		MW-83	1/10/2022	W83-220110-	0.000362
		MW-84	1/7/2022	W84-220107-	0.000357
		MW-93	1/10/2022	W93-220110-	0.00159
		MW-94	1/10/2022	W94-220110-	0.000125
Iron, Dissolved	mg/L	MW-113	1/10/2022	W113220110-	1.46
		MW-59	1/10/2022	W59-220110-	5.03
		MW-68	1/12/2022	W68-220112-	0.446
Manganese, Dissolved	mg/L	MW-113	1/10/2022	W113220110-	0.485
		MW-59	1/10/2022	W59-220110-	0.127
		MW-68	1/12/2022	W68-220112-	0.289
		MW-93	1/10/2022	W93-220110-	0.136
Trichlorothene	µg/L	MW-114	1/10/2022	W114220110-	0.000291
		MW-115	1/10/2022	W115220110-	0.000174

Table 3
CEDAR HILLS REGIONAL LANDFILL:
REGIONAL AQUIFER GROUNDWATER QUALITY STANDARD EXCEEDANCES
(Data Collected from Jan 01, 2022 to March 31, 2022)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Downgradient Wells					
Arsenic, Total	mg/L	MW-72	1/7/2022	W72-220107-	0.000162
		MW-74R	1/7/2022	W74R220107-	0.000507
		MW-75	1/7/2022	W75-220107-	0.000411
		MW-80	1/12/2022	W80-220112-	0.00339
		MW-85	1/10/2022	W85-220110-	0.000747
		MW-86	3/2/2022	W86-220302R	0.00193
		MW-87	1/10/2022	W87-220110-	0.308
Iron, Dissolved	mg/L	MW-72	1/7/2022	W72-220107-	2.66
		MW-75	1/7/2022	W75-220107-	2
		MW-80	1/12/2022	W80-220112-	1.83
		MW-87	1/10/2022	W87-220110-	4.69
Manganese, Dissolved	mg/L	MW-72	1/7/2022	W72-220107-	0.357
		MW-75	1/7/2022	W75-220107-	0.246
		MW-80	1/12/2022	W80-220112-	0.301
		MW-87	1/10/2022	W87-220110-	0.537
See Data Qualifier List for Qualifier Information.					

Exceedance Criteria: WAC 173-200-040 - Water Quality Standards for Groundwaters of the State of Washington

Table 4
Ion Balance Calculations.
Cedar Hills Regional Landfill.
Regional Groundwater Monitoring Wells
Data Collected from January 01, 2022 - March 31, 2022

			Quarterly Upgradient and Crossgradient Wells																
	Site ID		MW-59			MW-66			MW-81			MW-83			MW-84			MW-93		
	Date		1/10/22			1/6/22			1/6/22			1/10/22			1/7/22			1/10/22		
Cations	**Molecular Weight**	**n**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	%(meq)
pH			6.8			6.7			6.8			6.6			6.9			7.1		
Conductance			206.4			184.4			148.0			591.0			178.0			261.4		
TDSobs			114.0			116.0			90.0			429.0			110.0			168.0		
Calcium	40.1	2	19.7	0.98	39.8	17.3	0.86	37.6	15.3	0.76	43.8	79.2	3.95	52.8	17.9	0.89	38.7	32.9	1.64	47.2
Magnesium	24.3	2	11.9	0.98	39.7	13.2	1.0862	47.3	8.1	0.67	38.3	33.1	2.72	36.4	13.0	1.06974	46.3	16.7	1.37	39.5
Potassium	39.1	1	1.3	0.032	1.3	1.2	0.03	1.3	0.9	0.023	1.3	4.1	0.11	1.4	1.3	0.03	1.4	1.6	0.04	1.2
Sodium	23.0	1	6.6	0.29	11.7	7.3	0.32	13.8	6.7	0.29	16.6	16.0	0.70	9.3	7.2	0.31	13.5	9.5	0.41	11.9
Iron	55.8	2	5.0	0.18	7.3	0.0	0.00036	0.016	0.0	0.00036	0.02	0.0	0.00036	0.0048	0.0	0.00036	0.016	0.0	0.00036	0.010
Manganese	54.9	2	0.13	0.00462	0.19	0.00	8.4E-06	0.0004	0.00	4.7E-06	0.0003	0.01	0.00033	0.0044	0.00	5.6E-05	0.002	0.14	0.00495	0.1423
Ammonia-N	14.0	1	0.006	0.00039	0.02	0.002	0.00014	0.006	0.002	0.00014	0.008	0.002	0.00014	0.0019	0.002	0.00016	0.007	0.058	0.00416	0.119
				2.47			**2.3**			**1.7**			**7.5**			**2.3**			**3.5**	
Alkalinity, Total			75.0			83.6			58.5			227.0			82.0			117.0		
Carbonate	60.0	2	0.028	0.00093	0.0	0.025	0.00082	0.0	0.020	0.00067	0.0	0.050	0.00165	0.0	0.037	0.00122	0.1	0.091	0.00302	0.094
Bicarbonate	61.0	1	91.44	1.50	67.9	101.94	1.67	78.9	71.33	1.17	70.3	276.84	4.54	66.4	99.97	1.64	76.1	142.56	2.34	73.1
Chloride	35.5	1	13.0	0.37	16.6	4.3	0.12	5.8	5.2	0.15	8.8	69.4	1.96	28.6	5.9	0.17	7.7	2.6	0.07	2.3
Nitrate-N	14.0	1	0.010	0.00071	0.03	0.395	0.028	1.3	1.470	0.10	6.3	0.916	0.07	1.0	0.193	0.01	0.6	0.010	0.00	0.0
Sulfate	96.1	2	16.3	0.34	15.4	14.2	0.30	14.0	11.6	0.24	14.5	13.0	0.27	4.0	16.1	0.34	15.6	37.5	0.78	24.4
Total Anions (meq/L)				**2.21**			**2.1**			**1.7**			**6.8**			**2.2**			**3.2**	
Total Ions (meq/L)				**4.7**			**4.4**			**3.4**			**14.3**			**4.5**			**6.7**	
Cation/Anion Ratio				**1.12**			**1.09**			**1.05**			**1.09**			**1.07**			**1.09**	
Percent Difference				**5.6**			**4.1**			**2.4**			**4.5**			**3.5**			**4.2**	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				2.28			2.30			1.74			7.48			2.31			3.47	
Calcium					43.08			37.58			43.77			52.85			38.70			47.32
Magnesium					42.92			47.29			38.26			36.42			46.35			39.61
Sodium + Potassium					14.00			15.13			17.97			10.72			14.95			13.07
sum (SO_4, Cl, HCO_3+CO_3)				2.21			2.09			1.56			6.77			2.14			3.19	
Sulfate					15.39			14.15			15.50			4.00			15.66			24.44
Chloride					16.62			5.83			9.40			28.93			7.72			2.33
Bicarbonate + Carbonate					67.99			80.02			75.10			67.08			76.61			73.23

Table 4
Ion Balance Calculations.
Cedar Hills Regional Landfill.
Regional Groundwater Monitoring Wells
Data Collected from January 01, 2022 - March 31, 2022

			Quarterly Upgradient and Crossgradient Wells																
	Site ID		MW-94			MW-113			MW-114			MW-115			MW-68			MW-72		
	Date		1/10/22			1/10/22			1/10/22			1/10/22			1/12/22			1/7/2022		
Cations	**Molecular Weight**	**n**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**
pH			6.3			7.1			6.6			6.5			6.8			7.0		
Conductance			310.2			342.0			260.3			262.9			238.2			279.5		
TDSobs			209.0			220.0			170.0			173.0			147.0			186.0		
Calcium	40.1	2	38.0	1.90	50.1	39.6	1.98	46.2	30.6	1.53	49.1	31.4	1.57	51.1	26.7	1.33	45.2	33.1	1.65	44.1
Magnesium	24.3	2	16.9	1.39	36.7	21.5	1.77	41.3	14.9	1.23	39.4	13.6	1.12	36.5	14.3	1.18	39.9	19.2	1.58	42.2
Potassium	39.1	1	2.9	0.07	1.9	2.2	0.06	1.3	2.3	0.06	1.9	2.1	0.05	1.7	1.6	0.04	1.4	2.0	0.05	1.4
Sodium	23.0	1	9.8	0.43	11.3	9.4	0.41	9.5	6.8	0.30	9.6	7.5	0.33	10.6	8.5	0.37	12.5	8.1	0.35233	9.408
Iron	55.8	2	0.0	0.00036	0.009	1.5	0.0522857	1.221	0.0	0.0003581	0.012	0.0	0.0003581	0.012	0.4	0.016	0.54	2.7	0.09526	2.5436
Manganese	54.9	2	0.00	3E-05	0.0008	0.49	0.0176563	0.4125	0.00	9.138E-06	0.0003	0.00	9.793E-05	0.0032	0.29	0.011	0.36	0.36	0.013	0.347
Ammonia-N	14.0	1	0.002	0.00014	0.004	0.015	0.0010495	0.025	0.002	0.0001428	0.005	0.002	0.0001428	0.005	0.017	0.001	0.042	0.017	**0.0**	
				3.8			**4.3**			**3.1**			**3.1**			**2.9**			**3.7**	
Alkalinity, Total			130.0			144.0			99.8			93.8			117.0			124.0		
Carbonate	60.0	2	0.016	0.00053	0.015	0.102	0.0033878	0.086	0.024	0.0007962	0.027	0.018	0.0006083	0.021	0.049	0.00162	0.06	0.068	0.00	0.1
Bicarbonate	61.0	1	158.57	2.60	73.0	175.47	2.88	72.7	121.71	1.99	68.7	114.40	1.88	65.6	142.64	2.34	85.4	151.14	2.48	73.7
Chloride	35.5	1	29.4	0.83	23.3	29.9	0.84	21.3	21.3	0.60	20.7	25.5	0.72	25.2	3.1	0.088	3.2	8.1	0.23	6.8
Nitrate-N	14.0	1	0.142	0.01	0.3	0.010	0.00	0.0	2.040	0.15	5.0	0.766	0.05	1.9	0.010	0.00071	0.026	0.010	0.00	0.0
Sulfate	96.1	2	5.8	0.12	3.4	11.2	0.23	5.9	7.8	0.16	5.6	10.0	0.21	7.3	14.9	0.31	11.3	31.4	**0.7**	
Total Anions (meq/L)				**3.6**			**4.0**			**2.9**			**2.9**			**2.7**			**3.4**	
Total Ions (meq/L)				**7.3**			**8.2**			**6.0**			**5.9**			**5.7**			7.109	
Cation/Anion Ratio				**1.06**			**1.08**			**1.07**			**1.07**			**1.08**			**1.113**	
Percent Difference				**3.1**			**3.9**			**3.4**			**3.5**			**3.7**			**5.369**	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				3.79			4.21			3.11			3.06			2.92			3.64	
Calcium					50.08			46.94			49.09			51.14			45.63			45.43
Magnesium					36.73			42.03			39.42			36.52			40.30			43.46
Sodium + Potassium					13.19			11.03			11.49			12.34			14.06			
																				100.000
sum (SO_4, Cl, HCO_3+CO_3)				3.55			3.96			2.76			2.80			2.74			3.36	
Sulfate					3.42			5.89			5.86			7.43			11.33			19.44
Chloride					23.36			21.32			21.78			25.66			3.21			6.82
Bicarbonate + Carbonate					73.22			72.79			72.36			66.91			85.45			73.74

Table 4
Ion Balance Calculations.
Cedar Hills Regional Landfill.
Regional Groundwater Monitoring Wells
Data Collected from January 01, 2022 - March 31, 2022

			Quarterly Downgradient to Waste Cells and North End Facilities													
	Site ID		MW-74R			MW-75			MW-80			MW-85			MW-87		
	Date		1/7/22			1/7/22			1/12/22			1/10/22			1/10/22		
Cations	**Molecular Weight**	**n**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**
pH			6.9			6.9			7.0			6.9			6.8		
Conductance			437.0			338.8			271.9			316.1			445.7		
TDSobs			281.0			231.0			181.0			218.0			290.0		
Calcium	40.1	2	47.5	2.37	41.1	35.0	1.75	40.7	31.3	1.56	46.4	37.2	1.86	43.7	50.7	2.53	42.1
Magnesium	24.3	2	34.3	2.82	48.9	24.2	1.99	46.4	16.4	1.35	40.1	23.1	1.90	44.8	33.4	2.75	45.8
Potassium	39.1	1	2.2	0.06	1.0	2.1	0.05	1.3	1.7	0.042	1.3	1.9	0.047	1.1	2.6	0.07	1.1
Sodium	23.0	1	11.9	0.52	9.0	9.1	0.40	9.2	7.7	0.33	9.9	10.1	0.439	10.4	10.8	0.47	7.8
Iron	55.8	2	0.0	0.00045	0.008	2.6	0.09	2.19	1.8	0.066	1.9	0.0	0.00036	0.0084	4.7	0.16796	2.798
Manganese	54.9	2	0.00	6.8E-06	0.00012	0.25	0.00896	0.21	0.30	0.011	0.33	0.00	4.1E-05	0.00097	0.54	0.01955	0.3256
Ammonia-N	14.0	1	0.002	0.00014	0.002	0.009	0.00061	0.014	0.008	0.00056	0.017	0.002	0.00014	0.0034	0.017	0.0012	0.020
				5.8			**4.3**			**3.4**			**4.2**			**6.0**	
Alkalinity, Total			203.0			114.0			118.0			155.0			119.0		
Carbonate	60.0	2	0.088	0.00295	0.05	0.053	0.00177	0.04	0.071	0.00236	0.08	0.081	0.0027	0.07	0.041	0.00137	0.024
Bicarbonate	61.0	1	247.48	4.06	75.5	138.97	2.28	57.6	143.82	2.36	76.0	188.94	3.10	76.0	145.10	2.38	42.1
Chloride	35.5	1	22.7	0.64	11.9	12.4	0.35	8.8	4.5	0.13	4.0	9.9	0.28	6.9	17.9	0.50	8.9
Nitrate-N	14.0	1	0.488	0.03484	0.65	0.010	0.00071	0.018	0.017	0.00121	0.04	0.101	0.00721	0.2	0.010	0.00	0.0
Sulfate	96.1	2	30.5	0.64	11.8	63.6	1.32	33.5	29.5	0.61	19.8	33.1	0.69	16.9	133.0	2.77	49.0
Total Anions (meq/L)				**5.4**			**4.0**			**3.1**			**4.1**			**5.7**	
Total Ions (meq/L)				**11.1**			**8.2**			**6.5**			**8.3**			**11.7**	
Cation/Anion Ratio				**1.07**			**1.09**			**1.08**			**1.04**			**1.06**	
Percent Difference				**3.6**			**4.1**			**4.1**			**2.0**			**3.0**	
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)				5.77			4.19			3.29			4.24			5.81	
Calcium					41.11			41.71			47.52			43.74			43.51
Magnesium					48.95			47.56			41.06			44.79			47.27
Sodium + Potassium					9.94			10.74			11.42			11.47			9.22
sum (SO_4, Cl, HCO_3+CO_3)				5.33			3.95			3.10			4.07			5.65	
Sulfate					11.90			33.49			19.82			16.94			48.98
Chloride					12.00			8.85			4.05			6.87			8.93
Bicarbonate + Carbonate					76.09			57.66			76.13			76.19			42.09

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Figure 5. Trilinear Diagram Upgradient and Crossgradient Regional Wells
Cedar Hills Regional Landfill
First Quarter 2022

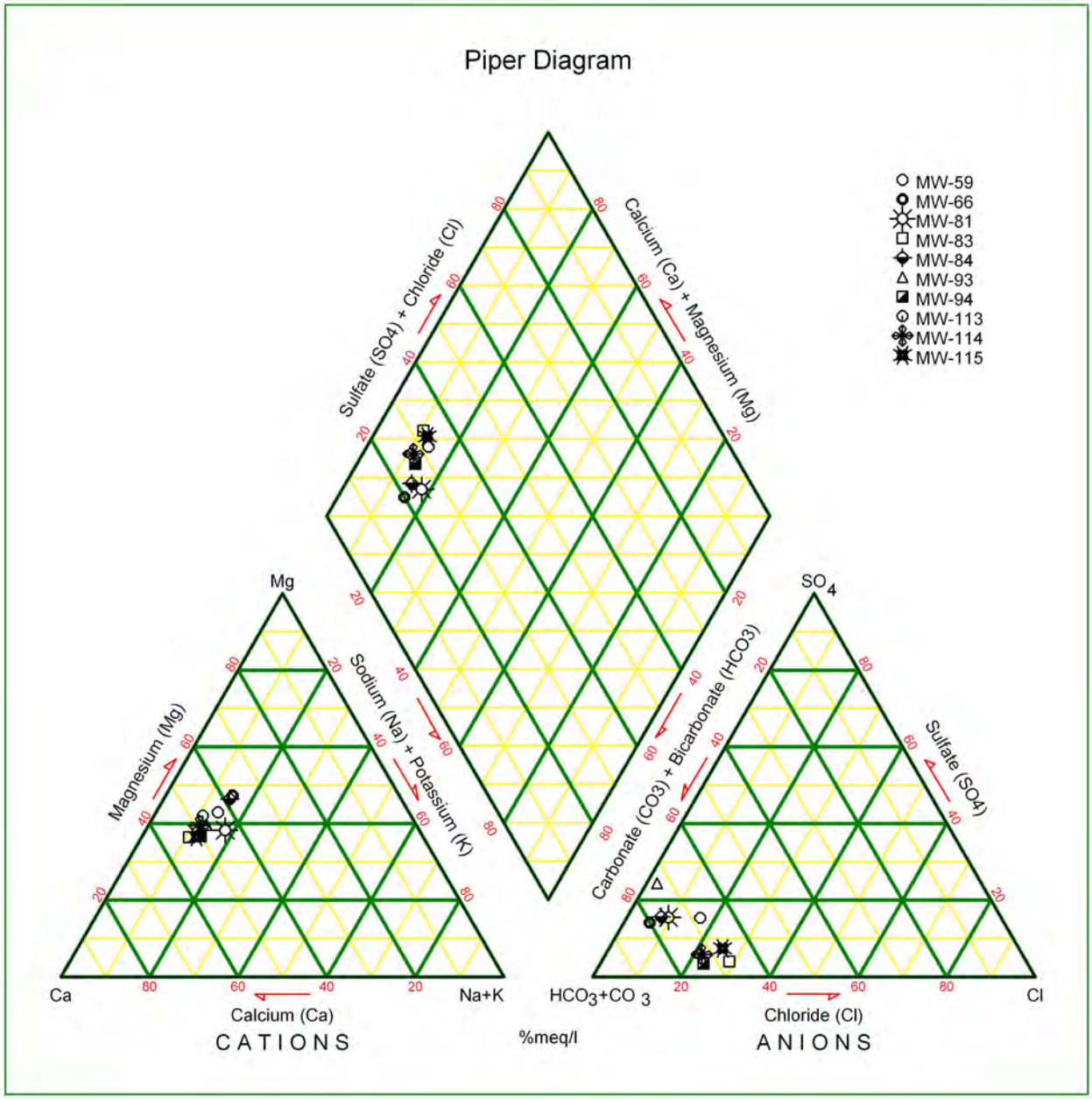

Figure 6. Trilinear Diagram Downgradient Regional Wells
Cedar Hills Regional Landfill
First Quarter 2022

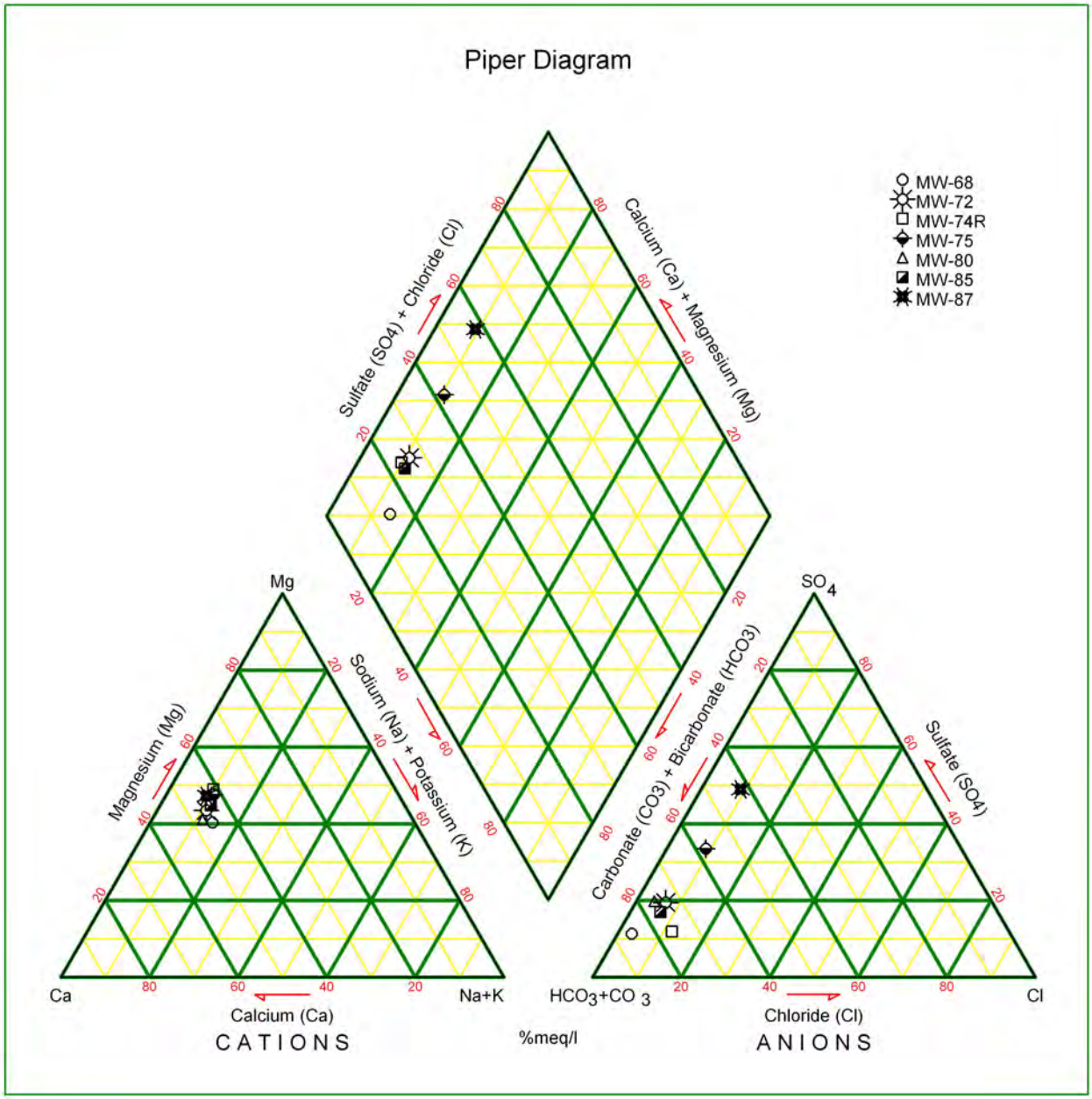

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TABLE 5
INTRAWELL PREDICTION LIMIT VALUES AND RESULTS.
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER QUARTERLY AND SEMI-ANNUAL MONITORING WELLS
(Data Collected from Jan 01, 2022 - March 31, 2022)

Well	Parameter / Units	Total Antimony mg/L	Total Arsenic mg/L	Total Barium mg/L	Total Beryllium mg/L	Total Cadmium mg/L	Total Chromium mg/L	Total Cobalt mg/L	Total Copper mg/L	Total Lead mg/L	Total Nickel mg/L	Total Selenium mg/L	Total Silver mg/L	Total Thallium mg/L	Total Vanadium mg/L	Total Zinc mg/L	Nitrate as N mg/L	*cis*-1,2-Dichloroethene ug/L	Tetrachloroethene *ug/L*	Trichloroethene ug/L	Vinyl Chloride ug/L
Upgradient and Crossgradient Wells																					
MW-59	Limit	0.001	0.001	0.0051	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.00748	0.05	1.41	0.2	0.2	0.02
	Result	< 0.0003	0.000491	0.00432	< 0.0001	< 0.0005	< 0.0002	< 0.0005	< 0.0002	< 0.0001	0.000608	< 0.0005	< 0 00004	<0.000075	<0.000075	0.0005	< 0.01	**1.45**	< 0.1	< 0.1	< 0.01
MW-66	Limit	0.001	0.001	0.0068	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00104	0.003	0.001	0.002	0.004	0.910	0.2	0.2	0.2	0.02
	Result	< 0.0003	0.0008	0.00452	< 0.0001	< 0.0005	0.000205	< 0.000056	0.000216	< 0.0001	0.000312	0.000989	< 0 00004	<0.000075	0.000784	0.0014	0.395	< 0.1	< 0.1	< 0.1	< 0.01
MW-81	Limit	0.001	0.001	0.0049	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00104	0.003	0.001	0.00253	0.00895	1.7376423	0.2	0.2	0.2	0.02
	Result	< 0.0003	0.000583	0.00347	< 0.0001	< 0.0005	< 0.0002	< 0.0005	0.0002 U	< 0.0001	0.000241	0.000808	< 0 00004	<0.000075	0.00162	0.00068	1.47	< 0.1	< 0.1	< 0.1	< 0.01
MW-83	Limit	0.001	0.001	0.0124	0.001	0.002	0.0628	0.003	0.00771	0.001	0.01	0.001	0.003	0.001	0.002	0.004	4.97	0.2	0.2	2.82	0.02
	Result	< 0.0003	0.000362	0.0118	< 0.0001	< 0.0005	0.000207	0.000272	0.00406	< 0.0001	0.00213	0.0005 U	< 0 00004	<0.000075	0.000896	0.0005 U	0.916	< 0.1	< 0.1	1.69	< 0.01
MW-84	Limit	0.001	0.001	0.0050	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.662	0.2	0.2	0.2	0.02
	Result	< 0.0003	0.000357	**0.00549**	< 0.0001	< 0.0005	< 0.0002	< 0.0005	< 0.0002	< 0.0001	0.000483	0.000528	< 0 00004	<0.000075	0.000492	0.00284	0.193	< 0.1	< 0.1	< 0.1	< 0.01
MW-93	Limit	0.001	0.00146091	0.0108	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.00265	0.0112	0.0549	0.2	0.2	0.2	0.02
	Result	< 0.0003	**0.00159**	0.00817	< 0.0001	5.95E-05	0.000383	0.000264	0.0012	0.000178	0.000499	0.0005 U	< 0 00004	<0.000075	0.00228	**0.0134**	< 0.01	< 0.1	< 0.1	< 0.1	< 0.01
MW-94	Limit	0.001	0.001	0.0054	0.001	0.002	0.005	0.003	0.0051	0.001	0.01	0.001	0.003	0.001	0.002	0.004	2.56	0.2	0.2	3.54	0.02
	Result	< 0.0003	0.000125	0.00	< 0.0001	< 0.0005	< 0.0002	0.000114	0.0015	< 0.0001	0.000695	< 0.0005	< 0 00004	<0.000075	0.00107	< 0.0005	0.142	< 0.1	0.1 U	2.11	< 0.01
Downgradient Wells																					
MW-68	Limit	0.001	0.32578304	0.0197	0.001	0.002	0.005	0.0015	0.0115999	0.001	0.005	0.001	0.003	0.001	0.0037	0.004	0.05	0.20	1	0.2	0.02
	Result	< 0.0003	0.0211	0.0105	< 0.0001	< 0.0005	< 0.0002	0.000215	0.000444	< 0.0001	0.000441	0.0005 U	< 0 00004	<0.000075	0.000427	0.0005 U	< 0.01	< 0.1	< 0.1	< 0.1	< 0.01
MW-69*	Limit	0.001	0.00386	0.0142	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.0112	0.076	0.2	0.2	0.2	0.02
	Result	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-72	Limit	0.001	0.001	0.0162	0.001	0.002	0.005	0.003	0.00331	0.00104	0.01	0.001	0.003	0.001	0.002	0.02583313	0.068	0.2	0.2	0.2	0.02
	Result	< 0.0003	0.000162	0.0135	< 0.0001	< 0.0005	0.000217	< 0.0005	0.000218	< 0.0001	0.000198	0.0005 U	< 0 00004	<0.000075	0.0000821	0.00141	< 0.01	< 0.1	< 0.1	< 0.1	< 0.01
MW-74R	Limit	0.001	0.00145	0.0159	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00104	0.003	0.001	0.002	0.004	0.49	0.2	0.2	0.20	0.02
	Result	< 0.0003	0.000507	0.0117	< 0.0001	< 0.0005	< 0.0002	< 0.0005	0.000535	< 0.0001	0.00098	0.000578	< 0 00004	<0.000075	0.000674	0.0005 U	**0.488**	< 0.1	< 0.1	< 0.1	< 0.1
MW-75	Limit	0.001	0.001	0.0139	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.050	0.2	0.2	0.2	0.02
	Result	< 0.0003	0.000411	0.0138	< 0.0001	< 0.0005	< 0.0002	< 0.0005	< 0.0002	< 0.0001	0.0001 U	0.0005 U	< 0 00004	<0.000075	<0.000075	0.0005 U	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
MW-80	Limit	0.001	0.0392	0.0230	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.0117	0.028	0.2	1	0.2	0.02
	Result	< 0.0003	0.00339	0.0144	< 0.0001	< 0.0005	< 0.0002	< 0.0005	< 0.0002	< 0.0001	0.000106	0.0005 U	< 0 00004	<0.000075	0.0000829	0.00695	0.017	< 0.1	< 0.1	< 0.1	< 0.1
MW-85	Limit	0.001	0.001	0.0076	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00136104	0.003	0.001	0.002	0.004	1.63	0.2	0.2	0.20	0.02
	Result	< 0.0003	0.000747	0.01	< 0.0001	< 0.0005	< 0.0002	< 0.0005	0.000225	< 0.0001	0.00038	0.000795	< 0 00004	<0.000075	0.000939	0.000915	0.101	< 0.1	< 0.1	< 0.1	< 0.1
MW-86	Limit	0.001	0.0194	0.0088	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.0017	0.003	0.001	0.00336	0.004	2.50	0.2	0.2	0.20	0.02
	Result	< 0.0003 U	0.00193	0.01	< 0.0001 U	< 0.00005 U	0.000621	< 0.00005 U	**0.00547**	< 0.0001 U	0.000173 D	< 0.0005 U	< 0.00004 U	< 0.000075 U	0.000153	0.00229					
MW-87	Limit	0.001	0.0256	0.0383	0.001	0.002	0.005	0.003	0.00347	0.001	0.01	0.001	0.003	0.001	0.00468	0.00892	0.0803	0.20	0.2	0.2	0.02
	Result	**0.0015**	**0.308**	**0.2**	**0.00228**	0.000273	**0.0082**	0.000549	**0.0122**	**0.0043**	0.0015	**0.00899**	< 0 00008	0.00015 U	**0.0573**	**0.0171**	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1

NOTE:
Results greater than Limit Value in **Bold Red**
* MW-69 No sample collected; well was damaged.

TABLE 6

CEDAR HILLS REGIONAL LANDFILL.

REGIONAL AQUIFER VOLATILE ORGANIC COMPOUND DETECTIONS

(Data Collected from Jan 1, 2022 to March 31, 2022)

Analyte	Site ID	Date	Sample ID	Sample Value (µg/L)
Upgradient and Crossgradient Wells				
Cis- 1,2-Dichloroethene	MW-59	1/10/2022	W59-220110-	1.45
Trichloroethene	MW-114	1/10/2022	W114220110-	12.2
	MW-115	1/10/2022	W115220110-	5.73
	MW-83	1/10/2022	W83-220110-	1.69
	MW-94	1/10/2022	W94-220110-	2.11
Downgradient Wells				
No volatile organic compound detections for this Quarter				

TABLE 7
CEDAR HILLS REGIONAL LANDFILL
PERCHED ZONES GROUNDWATER QUALITY STANDARD EXCEEDANCES
(Data Collected from Jan 01 2022 to March 31, 2022)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
East Perched Zone Wells					
pH (Field)	pH Units	MW-102	1/18/2022	W102220118-	6.3
		MW-107	1/13/2022	W107220113-	5.67
		MW-110	1/11/2022	W110220111-	6.38
		MW-111	1/13/2022	W111220113-	5.86
		MW-30A	1/19/2022 ; 2/18/2022	W30A220119- , W30A220218-	6.29, 6.33
		MW-47	7/19/2021	W47-210719-	6.49
		MW-EB6	7/13/2021	WEB6210713-	6.16
1,1-Dichloroethane	µg/L	MW-30A	1/19/2022	W30A220119-	1.95
Arsenic, Total	mg/L	MW-102	1/18/2022	W102220118-	0.000249
		MW-103	1/12/2022	W103220112-	0.00896
		MW-107	1/13/2022	W107220113-	0.00685
		MW-108	1/14/2022	W108220114-	0.00195
		MW-109	1/14/2022	W109220114-	0.093
		MW-110	1/11/2022	W110220111-	0.0111
		MW-111	1/13/2022	W111220113-	0.000614
		MW-112	1/18/2022	W112220118-	0.00325
		MW-30A	1/19/2022	W30A220119-	0.000617
		MW-47	1/19/2022	W47-220119-	0.000808
		MW-62	1/18/2022	W62-220118-	0.000202
		MW-EB6	1/11/2022	WEB6220111-	0.00131
Iron, Dissolved	mg/L	MW-107	1/13/2022	W107220113-	4.99
		MW-109	1/14/2022	W109220114-	15.5
		MW-47	1/19/2022	W47-220119-	0.612
Manganese, Dissolved	mg/L	MW-107	1/13/2022	W107220113-	4.3
		MW-109	1/14/2022	W109220114-	2.53
		MW-110	1/11/2022	W110220111-	1.3
		MW-47	1/19/2022	W47-220119-	0.948
Sodium	mg/l	MW-108	1/14/2022	W108220114-	31
		MW-109	1/14/2022	W109220114-	1180 D
		MW-110	1/11/2022	W110220111-	37.4
		MW-112	1/18/2022	W112220118-	26
Vinyl Chloride	µg/L	MW-107	1/13/2022	W107220113-	0.548
		MW-109	1/14/2022	W109220114-	0.241
		MW-110	1/11/2022	W110220111-	0.155
		MW-47	1/19/2022	W47-220119-	4.82
Benzene	µg/L	MW-109	1/14/2022	W109220114-	1.52 JT
Specific conductance, field	µg/L	MW-109	1/14/2022	W109220114-	4078.6
		MW-47	1/19/2022	W47-220119-	806.5
		MW-47	2/18/2022	W47-220218-	818
Total Dissolved Solids	µg/L	MW-109	1/14/2022	W109220114-	3330
		MW-47	1/19/2022	W47-220119-	555
Chromium	µg/L	MW-109	1/15/2022	W109220114-	0.165
South Solid Waste Area Perched Wells					

TABLE 7
CEDAR HILLS REGIONAL LANDFILL
PERCHED ZONES GROUNDWATER QUALITY STANDARD EXCEEDANCES
(Data Collected from Jan 01 2022 to March 31, 2022)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Arsenic, Total	mg/L	MW-101	1/19/2022	W101220119-	0.0118
Iron, Dissolved	mg/L	MW-101	1/19/2022	W101220119-	0.591
Manganese, Dissolved	mg/L	MW-101	1/19/2022	W101220119-	1.08
Vinyl Chloride	µg/L	MW-101	1/19/2022	W101220119-	0.418

See Data Qualifier List for Qualifier Information.
Exceedance Criteria: WAC 173-200-040 - Water Quality Standards for Groundwaters of the State of Washington

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Figure 7. Trilinear Diagram East Perched Zone Wells
Cedar Hills Regional Landfill
First Quarter 2022

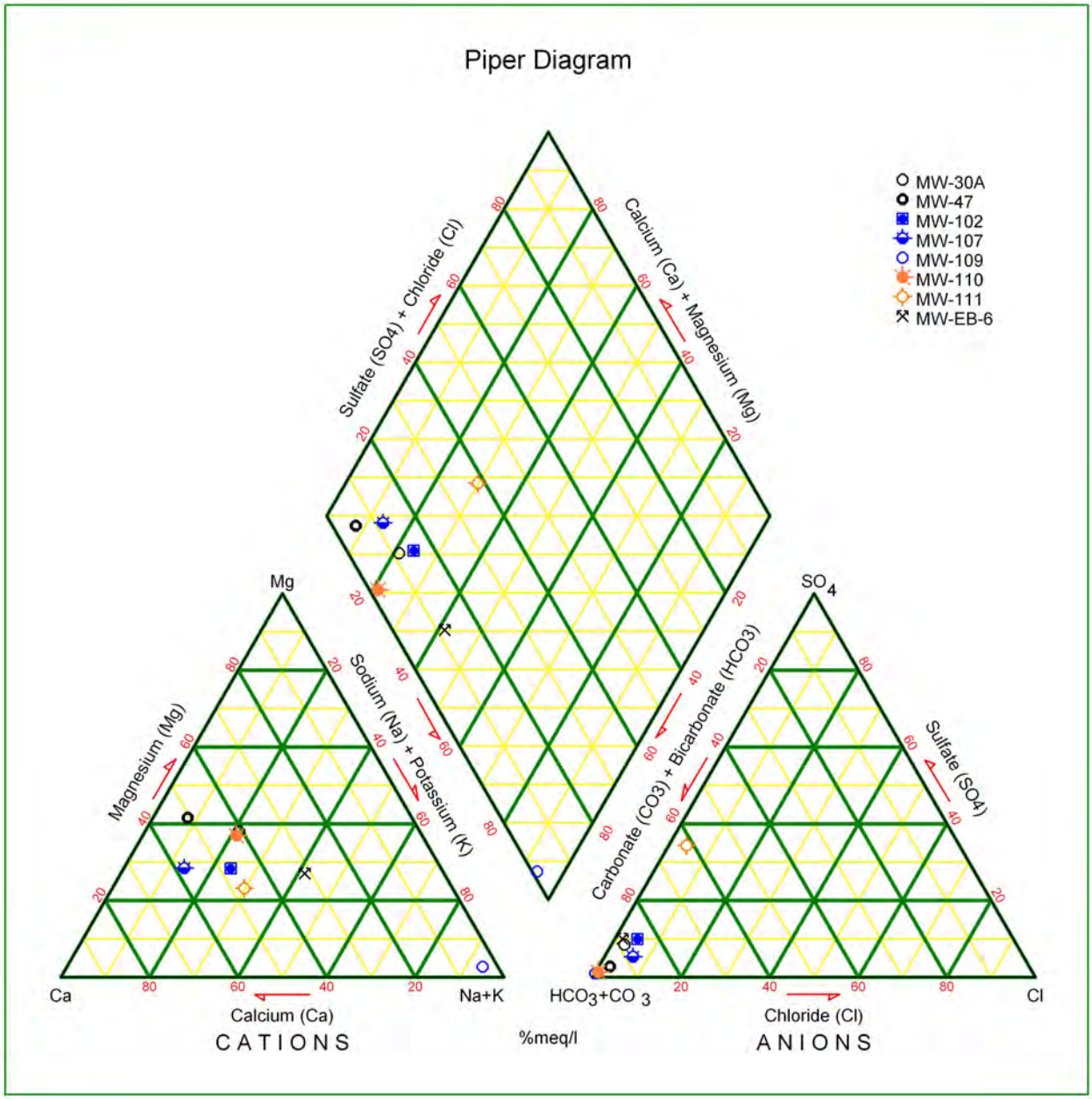

Figure 8. Trilinear Diagram SSW Area Perched Zones Wells
Cedar Hills Regional Landfill
First Quarter 2022

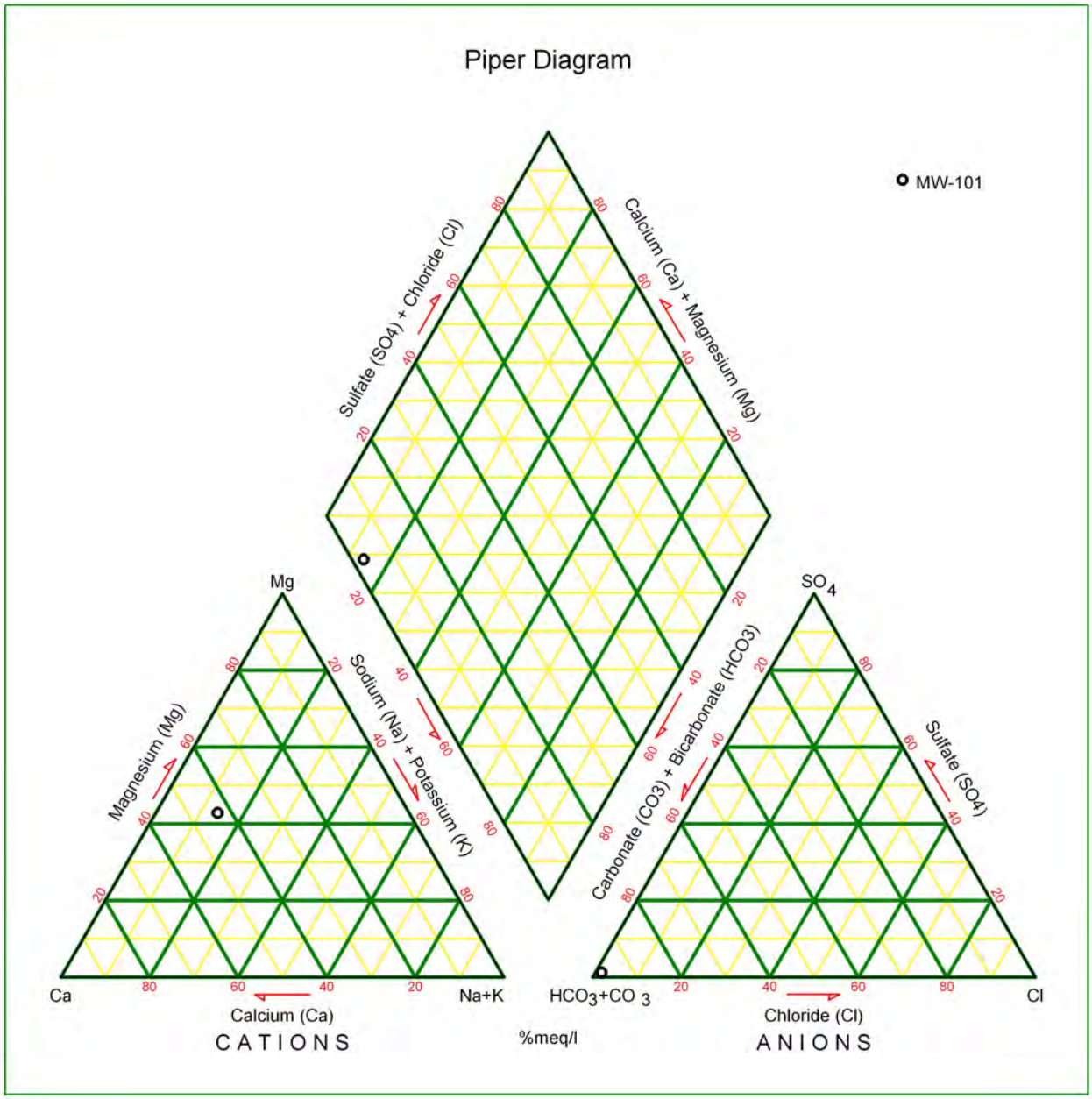

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Table 8
Ion Balance Calculations.
Cedar Hills Regional Landfill
Perched Zones Groundwater Monitoring Wells

Data Collected from January 01, 2022 to March 31, 2022

		East Perched Zone																																	
Site ID		**MW-30A**			**MW-47**			**MW-62**			**MW-102**			**MW-103**			**MW-107**			**MW-108**			**MW-109**			**MW-110**			**MW-111**			**MW-112**			**MW-EB6**		
Date		**1/19/2022**			**1/19/2022**			**1/19/2022**			**1/18/2022**			**1/19/2022**			**1/13/2022**			**1/19/2022**			**1/14/2022**			**1/11/2022**			**1/13/2022**			**1/19/2022**			**1/11/2022**		
Cations	**Weight**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**	**mg/L**	**meq/L**	**%(meq)**
pH		6.3			6.6			6.0			6.3			7.7			5.7			7.0			7.4			6.4			5.9			7.1			6.3		
Conductance		212.4			806.5			142.5			187.0			223.5			219.0			312.0			4078.6			586.9			95.1			299.0			81.9		
TDSobs		174.0			555.0			117.0			146.0			159.0			132.0			254.0			3330.0			412.0			86.7			237.0			68.0		
Calcium	40.1	22.1	1.10	40.8	112.0	5.59	50.3	18.2	0.91	50.4	22.3	1.11	47.5	23.7	1.18	43.1	28.0	1.40	50.4	22.5	1.12	33.3	37.6	1.88	3.4	69.7	3.48	41.7	10.0	0.50	47.0	31.8	1.59	37.6	7.1	0.36	31.4
Magnesium	24.3	12.5	1.03	38.0	55.8	4.59	41.3	4.4	0.36	20.2	8.1	0.66	28.3	10.9	0.90	32.7	8.3	0.68	24.7	9.2	0.76	22.4	18.1	1.49	2.7	37.2	3.06	36.7	3.0	0.25	23.2	15.8	1.30	30.8	3.7	0.31	27.0
Potassium	39.1	1.5	0.039	1.45	5.0	0.128	1.16	0.9	0.023	1.28	1.4	0.036	1.52	2.6	0.066	2.42	2.5	0.064	2.32	1.4	0.035	1.04	2.4	0.060	0.11	3.4	0.087	1.05	0.3	0.008	0.79	3.0	0.076	1.81	0.9	0.023	1.99
Sodium	23.0	12.3	0.54	19.8	17.0	0.74	6.7	11.6	0.50	28.0	12.2	0.53	22.7	13.7	0.60	21.7	6.1	0.26	9.5	33.6	1.46	43.3	1180.0	51.33	92.6	38.4	1.67	20.0	7.1	0.31	29.0	26.3	1.14	27.1	10.3	0.45	39.5
Iron	55.8	0.0	0.00036	0.0132	0.6	0.02192	0.1973	0.0	0.00036	0.0199	0.0	0.00036	0.0153	0.0	0.00036	0.0131	5.0	0.1787	6.4461	0.0	0.00036	0.0106	15.5	0.55509	1.0017	0.0	0.00063	0.0076	0.0	0.00036	0.0337	0.0	0.00036	0.0085	0.0	0.00078	0.0688
Manganese	54.9	0.0	4.1E-06	0.00015	0.9	0.03451	0.31074	0.0	2.9E-05	0.00163	0.0	1.2E-05	0.00049	0.0	0.00016	0.00589	4.3	0.15654	5.64664	0.0	1E-05	0.00030	2.5	0.0921	0.16621	1.3	0.04733	0.56706	0.0	8.6E-05	0.00812	3.0	0.10849	2.57296	0.0	0.00012	0.01039
Ammonia-N	14.0	0.0	0.00014	0.0053	0.0	0.00153	0.0138	0.0	0.00014	0.0079	0.0	0.00014	0.0061	0.0	0.00015	0.0055	0.4	0.02627	0.9477	0.0	0.00014	0.0042	0.2	0.01428	0.0258	0.0	0.00121	0.0145	0.0	0.00014	0.0134	0.0	0.00037	0.0088	0.0	0.00114	0.1000
			2.71			**11.11**			**1.80**	**100.0**		**2.34**			**2.74**	**100.0**		**2.77**			**3.38**	**100.0**		**55.41**			**8.35**			**1.06**			**4.22**	**100.0**		**1.14**	
Alkalinity, Total		93.9			482.0			64.20			86.9			115.00			102.0			105.00			2890.0			384.0			24.3			143.00			43.5		
Carbonate	60.0	0.011	0.000	0.015	0.115	0.004	0.038	0.004	0.000	0.007	0.010	0.000	0.016	0.308	0.010	0.388	0.003	0.000	0.004	0.059	0.002	0.054	4.159	0.139	0.237	0.055	0.002	0.024	0.001	0.000	0.004	0.099	0.003	0.088	0.005	0.000	0.016
Bicarbonate	61.0	114.54	1.877	75.636	587.81	9.635	94.626	78.32	1.284	77.188	106.00	1.737	81.553	139.67	2.289	86.557	124.43	2.040	88.165	127.98	2.098	57.193	3517.34	57.653	98.542	468.37	7.677	98.027	29.64	0.486	49.147	174.26	2.856	76.337	53.06	0.870	86.953
Chloride	35.5	2.3	0.064	2.568	9.2	0.259	2.549	3.6	0.101	6.055	3.8	0.107	5.005	4.8	0.135	5.087	5.3	0.150	6.499	1.6	0.046	1.254	3.9	0.110	0.188	1.8	0.051	0.648	1.1	0.032	3.252	6.0	0.170	4.546	0.6	0.018	1.765
Nitrate-N	14.0	5.1	0.361	14.525	0.0	0.001	0.007	1.6	0.111	6.697	1.2	0.083	3.887	0.0	0.003	0.097	0.0	0.001	0.031	0.7	0.048	1.310	0.5	0.036	0.061	0.0	0.001	0.009	2.8	0.200	20.219	0.1	0.008	0.221	0.2	0.014	1.399
Sulfate	96.1	8.7	0.180	7.256	13.6	0.283	2.781	8.0	0.167	10.053	9.8	0.203	9.539	10.0	0.208	7.872	5.9	0.123	5.301	70.8	1.474	40.190	27.3	0.568	0.972	4.9	0.101	1.292	13.0	0.271	27.378	33.8	0.704	18.808	4.7	0.099	9.867
Total Anions (meq/L)			**2.48**			**10.18**			**1.66**	**100.0**		**2.13**			**2.64**	**100.0**		**2.31**			**3.67**	**100.0**		**58.51**			**7.83**			**0.99**			**3.74**	**100.0**		**1.00**	
Total Ions (meq/L)			**5.188**			**21.288**			**3.464**			**4.473**			**5.387**			**5.086**			**7.043**			**113.920**			**16.177**			**2.051**			**7.958**			**2.135**	
Cation/Anion Ratio			**1.090**			**1.091**			**1.083**			**1.100**			**1.037**			**1.198**			**0.920**			**0.947**			**1.066**			**1.075**			**1.127**			**1.135**	
Percent Difference			**4.317**			**4.342**			**3.977**			**4.748**			**1.808**			**9.023**			**-4.154**			**-2.713**			**3.179**			**3.598**			**5.965**			**6.316**	
Trilinear Diagram Data																																						
sum (Ca, Mg, Na+K)			2.71			11.05			1.80			2.34			2.74			2.41			3.37			54.75			8.30			1.06			4.11			1.13		
Calcium				40.8			50.6			50.4			47.5			43.1			58.0			33.3			3.4			41.9			47.0			38.6			31.4
Magnesium				38.0			41.6			20.2			28.3			32.7			28.4			22.4			2.7			36.9			23.2			31.7			27.0
Sodium + Potassium				21.2			7.9			29.3			24.2			24.2			13.6			44.3			93.9			21.2			29.8			29.7			41.5
										100.0						100.0						100.0												100.0				
sum (SO_4, Cl, HCO_3+CO_3)			2.122			10.181			1.552			2.048			2.642			2.313			3.620			58.470			7.831			0.789			3.733			0.986		
Sulfate				8.5			2.8			10.8			9.9			7.9			5.3			40.7			1.0			1.3			34.3			18.8			10.0
Chloride				3.0			2.5			6.5			5.2			5.1			6.5			1.3			0.2			0.6			4.1			4.6			1.8
Bicarbonate + Carbonate				88.5			94.7			82.7			84.9			87.0			88.2			58.0			98.8			98.1			61.6			76.6			88.2
										100.0						100.0						100.0												100.0				

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TABLE 9
INTRAWELL PREDICTION LIMIT VALUES AND RESULTS
CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES MONITORING WELLS
(Data Collected from Jan 01, 2022 - March 31, 2022)

Well	Parameter / Units	Total Antimony mg/L	Total Arsenic mg/L	Total Barium mg/L	Total Beryllium mg/L	Total Cadmium mg/L	Total Chromium mg/L	Total Cobalt mg/L	Total Copper mg/L	Total Lead mg/L	Total Nickel mg/L	Total Selenium mg/L	Total Silver mg/L	Total Thallium mg/L	Total Vanadium mg/L	Total Zinc mg/L	Nitrate as N mg/L	1,1-Dichloroethane ug/L	1,1-Dichloroethene ug/L	1,2-Dichloroethane ug/L	*cis*-1,2-Dichloroethene *ug/L*	*trans*-1,2-Dichloroethene ug/L	Trichloroethene ug/L	Vinyl Chloride ug/L
East Perched Zone Wells																								
MW-30A	Limit	0.001	0.001	0.0077	0.001	0.002	0.005	0.003	0.0103	0.001	0.01	0.001	0.003	0.001	0.00331	0.0188	17	4.24	2.00	0.20	8.67	0.20	1.47	0.03
	Result	< 0.0003	0.0006	0.0042	< 0.0001	< 0.00005	0.0009	2.6	0.000065	0.000477	< 0.0001	0.000864	< 0.0005	< 0.00004	< 0.000075	0.002750	0.000707	5.05	1.95	< 0.1	< 0.1	< 0.1	0.94	< 0.01
MW-47	Limit	0.001	0.0113	0.0462	0.001	0.002	0.005	0.003	0.0105	0.00143	0.01	0.001	0.003	0.001	0.00317	0.168	0.024	0.99	2.00	0.44	6.26	0.41	0.23	8.32
	Result	< 0.0003	0.0008	0.0304	< 0.0001	< 0.00005	0.000232	**1.500000**	0.000287	0.00022	< 0.0001	**0.00127**	< 0.0005	< 0.00004	< 0.000075	0.000298	< 0.0005	< 0.01	0.64	< 0.1	< 0.1	< 0.1	< 0.1	4.82
MW-62*	Limit	0.001	0.001	0.0035	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.00212	0.004	7.4273256	10.20	0.20	0.20	10.30	0.20	0.47	0.02
	Result	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
South Solid Waste Area Wells																								
MW-101	Limit	0.001	0.014	0.0344	0.001	0.002	0.005	0.003	0.00416	0.00109	0.01	0.001	0.003	0.001	0.0039	0.00729	0.062	0.21	0.20	0.23	0.28	0.20	0.20	0.87
	Result	< 0.0003	0.0118	0.0185	< 0.0001	< 0.00005	0.000322	0.198 JT	0.000274	< 0.0002	< 0.0001	**0.00357**	< 0.0005	< 0.00004	< 0.000075	0.000466	0.000815	0.04	0.164 JT	< 0.1	0.142 JT	< 0.1	< 0.1	0.42

NOTE: MW-62 was not sampled due to DTW below pump.

Results greater than Limit Value in **RED Bold**

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TABLE 10

CEDAR HILLS REGIONAL LANDFILL.

PERCHED ZONES VOLATILE ORGANIC COMPOUND DETECTIONS

(Data Collected from Jan 01, 2022 to March 31, 2022)

Analyte	Site ID	Date	Sample ID	Sample Value (µg/L)
East Perched Zone Wells				
1,1-Dichloroethane	MW-101	1/19/2022	W101220119-	0.164 JT
	MW-102	1/18/2022	W102220118-	0.199 JT
	MW-107	1/13/2022	W107220113-	0.1 JT
	MW-110	1/11/2022	W110220111-	0.409
	MW-30A	1/19/2022	W30A220119-	1.95
	MW-47	1/19/2022	W47-220119-	0.641
	MW-62	1/18/2022	W62-220118-	0.281
1,2-Dichlorobenzene	MW-107	1/13/2022	W107220113-	0.254
	MW-110	1/11/2022	W110220111-	0.907
1,2-Dichloroethane	MW-110	1/11/2022	W110220111-	0.304
1,2-Dichloropropane	MW-110	1/11/2022	W110220111-	0.255
1,4-Dichlorobenzene	MW-107	1/13/2022	W107220113-	1.38
	MW-109	1/14/2022	W109220114-	1.53 JT
	MW-110	1/11/2022	W110220111-	0.218
Benzene	MW-107	1/13/2022	W107220113-	0.633
	MW-109	1/14/2022	W109220114-	1.52 JT
	MW-110	1/11/2022	W110220111-	0.237
Chlorobenzene	MW-107	1/13/2022	W107220113-	1.67
	MW-109	1/14/2022	W109220114-	1.3 JT
	MW-110	1/11/2022	W110220111-	0.576
Chloroethane	MW-101	1/19/2022	W101220119-	0.124 JT
	MW-47	1/19/2022	W47-220119-	0.223
Chloromethane	MW-101	1/19/2022	W101220119-	0.124 JT
	MW-47	1/19/2022	W47-220119-	0.223
Cis-1,2-Dichloroethene	MW-102	1/18/2022	W102220118-	0.294
	MW-107	1/13/2022	W107220113-	0.195 JT
	MW-110	1/11/2022	W110220111-	4.86
	MW-111	1/13/2022	W111220113-	0.264
	MW-30A	1/19/2022	W30A220119-	2.6
	MW-47	1/19/2022	W47-220119-	1.5
	MW-62	1/18/2022	W62-220118-	0.544
Dichlorodifluoromethane	MW-47	1/19/2022	W47-220119-	3.56
Toluene	MW-102	1/18/2022	W102220118-	0.271
	MW-109	1/14/2022	W109220114-	298
Trans-1,2-Dichloroethene	MW-107	1/13/2022	W107220113-	0.114 JT
	MW-110	1/11/2022	W110220111-	0.221
Trichloroethene	MW-110	1/11/2022	W110220111-	0.127 JT
	MW-111	1/13/2022	W111220113-	0.121 JT
	MW-30A	1/19/2022	W30A220119-	0.943
Vinyl Chloride	MW-101	1/19/2022	W101220119-	0.418
	MW-107	1/13/2022	W107220113-	0.548
	MW-109	1/14/2022	W109220114-	0.241
	MW-110	1/11/2022	W110220111-	0.155
	MW-47	1/19/2022	W47-220119-	4.82
South Solid Waste Area Perched Wells				
1,2-Dichloroethane				
	MW-101	1/19/2022	W101220119-	0.142 JT
Cis-1,2-Dichloroethene				
	MW-101	1/19/2022	W101220119-	0.198 JT
Vinyl Chloride				
	MW-101	7/28/2021	W101210728-	0.176

See Data Qualifier List for Qualifier Information.

TABLE 11
CEDAR HILLS REGIONAL LANDFILL.
VOLATILE ORGANIC COMPOUND DETECTIONS IN BLANKS
(Data Collected from Jan 01, 2022 to March 31, 2022)

Analyte	Site ID	Date	Sample ID	Sample Value (mg/L)
No VOA Field Blank Detections for 1Q2022				

See Data Qualifier List for Qualifier Information.

Analyte	Site ID	Date	Sample ID	Sample Value (µg/L)
ACETONE	Trip Blank	1/7/2022	VTRP220110Z	4.21 JT

See Data Qualifier List for Qualifier Information.

Analyte	Site ID	Date	Sample ID	Sample Value (µg/L)
No Method Blank Detections for 1Q2022				

See Data Qualifier List for Qualifier Information.

TABLE 12

CEDAR HILLS REGIONAL LANDFILL.

STORM AND SURFACE WATER MONITORING ACTIVITIES 1st QUARTER 2022

Station ID	Date	Planned Acitvity	Sample ID	Comment
SW-GS1	1/20/2022	NPDES Permit Sample	SGS1220120P	
SW-SL3	1/21/2022	NPDES Permit Sample	SSL3220120P	
SW-N4	1/22/2022	NPDES Permit Sample	SN4-220120P	
SW-TD1	1/14/2022	Top-Deck SW Monitoring	STD1220114-	
SW-TD2	3/1/2022	Top-Deck SW Monitoring	STD2220301-	
SW-E1	1/4/2022	East Perched Zone SW Monitoring	SE1-220114Q	
Stream Gauges	1/5/2022	Monthly Stream Gauge Level Measurement	--	North half of the landfill
Stream Gauges	1/5/2022	Monthly Stream Gauge Level Measurement	--	South half of the landfill

TABLE 13
CEDAR HILLS REGIONAL LANDFILL.
STORMWATER PERMIT BENCHMARKS AND EFFLUENT LIMITS

INDUSTRIAL STORMWATER GENERAL PERMIT
BENCHMARKS AND EFFLUENT LIMITS

Parameter	Units	Minimum Sampling Frequency	Benchmark	Effluent Limit	
				Monthly Average	Daily Maximum
pH	Std. Units	Quarterly	5.0 to 9.0	6.0 to 9.0	
Turbidity	NTU	Quarterly	25	--	--
Oil Sheen	Yes/No	Quarterly	None Visible	--	--
Copper, Total	ug/L	Quarterly	14	--	--
Zinc, Total	ug/L	Quarterly	117	110	200
BOD	mg/L	Quarterly	--	37	140
TSS	mg/L	Quarterly	--	27	88
Ammonia-N	mg/L	Quarterly	--	4.9	10
Alpha Terpineol	ug/L	Quarterly	--	16	33
Benzoic Acid	ug/L	Quarterly	--	71	120
4-Methylphenol*	ug/L	Quarterly	--	14	25
Phenol	ug/L	Quarterly	--	15	26

* Analytical result reported as the total of 3-Methylphenol (CAS RN 108-39-4) and 4-Methylphenol (CAS RN 106-44-5)

CONSTRUCTION STORMWATER GENERAL PERMIT
BENCHMARKS

Parameter	Units	Minimum Sampling Frequency	Benchmark
Turbidity	NTU	Weekly	25

TABLE 14
CEDAR HILLS REGIONAL LANDFILL.
STORMWATER PERMIT CRITERIA EXCEEDANCES
(Data Collected from Jan 01, 2022 - March 31, 2022)

SUMMARY OF ISGP* EXCEEDANCES

Parameter	Units	Sampling Location	Date	Value	Regulatory Limit	Type
No Stormwater Exceedances for this Quarter						

*ISGP - Industrial General Stormwater Permit

SUMMARY OF CSWGP* EXCEEDANCES

Parameter	Units	Sampling Location	Date	Value	Permit Limit	Type
Turbidity	NTU	C4	01/11/22	39.2	25	
Turbidity	NTU	C1	03/01/22	44.3	25	
Turbidity	NTU	C2	03/02/22	26.4	25	

*CSWGP - Construction Stormwater General Permit

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Table 15

Water Quality Standards for Groundwaters of the State of Washington

	Analyte	CAS No.	Ground Water Quality Criteria Criterion*	
I.	PRIMARY AND SECONDARY CONTAMINANTS AND RADIONUCLIDES			
	A. Primary Contaminants			
	Barium	7440-39-3	1	mg/L
	Cadmium	7440-43-9	0.005	mg/L
	Chromium	7440-47-3	0.05	mg/L
	Lead	7439-92-1	0.015	mg/L
	Mercury	7439-97-6	0.002	mg/L
	Selenium	7782-49-2	0.01	mg/L
	Silver	7440-22-4	0.05	mg/L
	Fluoride	16984-48-8	4	mg/L
	Nitrate	14797-55-8	10	mg/L
	Endrin	72-20-8	0.2	ug/L
	Methoxychlor	72-43-5	40	ug/L
	1,1,1-Trichloroethane	71-55-6	200	ug/L
	2,4-D	94-75-7	70	ug/L
	2,4,5-TP	93-72-1	100	ug/L
	Total Coliforms		1/100	mL
	B. Secondary Standards			
	Copper	7440-50-8	1	mg/L
	Iron	7439-89-6	0.3	mg/L
	Manganese	7439-96-5	0.05	mg/L
	Zinc	7440-66-6	5	mg/L
	Chloride	16887-00-6	250	mg/L
	Sulfate	14808-79-8	250	mg/L
	Total Dissolved Solids		500	mg/L
	Foaming Agents		0.5	mg/L
	pH	12408-02-5	6.5-8.5	units
	Corrosivity		non-corrosive	
	Color		15	units
	Odor-Threshold		3	units
	C. Radionuclides and Radioactivity			
	Gross Alpha particle activity		15	pCi/L
	Gross Beta particle activity		50	pCi/L
	Tritium	10028-17-8	20,000	pCi/L
	Strontium	7440-24-6	8	pCi/L
	Radium 226 & Radium 228		5	pCi/L
	Radium 226	13982-63-3	3	pCi/L
II.	CARCINOGENS			
	1,1-Dichloroethane	75-34-3	1	ug/L
	1,2-Dichloroethane	107-06-2	0.5	ug/L
	1,2-Dichloropropane	78-87-5	0.6	ug/L
	1,2-Dimethylhydrazine	540-73-8	60	ug/L
	1,2-Diphenylhydrazine	122-66-7	0.09	ug/L
	1,3-Dichloropropene tot.	542-75-6	0.2	ug/L
	1,4-Dichlorobenzene	106-46-7	4	ug/L
	1,4-Dioxane	123-91-1	7	ug/L
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.0000006	ug/L
	2,4,6-Trichlorophenol	88-06-2	4	ug/L
	2,4-Dinitrotoluene	121-14-2	0.1	ug/L
	2,4-Toluenediamine	95-80-7	0.002	ug/L
	2,6-Dinitrotoluene	606-20-2	0.1	ug/L
	2-Methoxy-5-nitroanaline	99-59-2	2	ug/L
	2-Methylaniline	95-53-4	0.2	ug/L
	2-Methylaniline hydrochloride	636-21-5	0.5	ug/L
	3,3'-Dichlorobenzidine	91-94-1	0.2	ug/L
	3,3'-Dimethoxybenzidine	119-90-4	6	ug/L
	3,3-Dimethylbenzidine	119-93-7	0.007	ug/L
	4,4'-Methylene bis(N,N'-dimethyl) aniline	101-61-1	2	ug/L
	4-Chloro-2-methyl analine	95-69-2	0.1	ug/L
	4-Chloro-2-methyl analine hydrochloride	3165-93-3	0.2	ug/L
	Acrylamide	79-06-1	0.02	ug/L
	Acrylonitrile	107-13-1	0.07	ug/L
	Aldrin	309-00-2	0.005	ug/L
	Aniline	62-53-3	14	ug/L
	Aramite	140-57-8	3	ug/L
	Arsenic	7440-38-2	0.00005	mg/L
	Azobenzene	103-33-3	0.7	ug/L
	Benzene	71-43-2	1	ug/L

Table 15

Water Quality Standards for Groundwaters of the State of Washington

Analyte	CAS No.	Ground Water Quality Criteria Criterion*	
Benzidine	92-87-5	0.0004	ug/L
Benzo(a)pyrene	50-32-8	0.008	ug/L
Benzotrichloride	98-07-7	0.007	ug/L
Benzyl chloride	100-44-7	0.5	ug/L
Bis(2-ethylhexyl)phthalate	117-81-7	6	ug/L
Bis(chloroethyl)ether	111-44-4	0.07	ug/L
Bis(chloromethyl)ether	542-88-1	0.0004	ug/L
Bromodichloromethane	75-27-4	0.3	ug/L
Bromoform	75-25-2	5	ug/L
Carbazole	86-74-8	5	ug/L
Carbon Tetrachloride	56-23-5	0.3	ug/L
Chlordane	5103-71-9	0.06	ug/L
Chlorodibromomethane	124-48-1	0.5	ug/L
Chloroform	67-66-3	7	ug/L
Chlorthalonil	1897-45-6	30	ug/L
DDT (includes DDE and DDD)	50-29-3, 72-55-9, 72-54-8	0.3	ug/L
Diallate	2303-16-4	1	ug/L
Dichlorovos	62-73-7	0.3	ug/L
Dieldrin	60-57-1	0.005	ug/L
Direct Black 38	1937-37-7	0.009	ug/L
Direct Blue 6	2602-46-2	0.009	ug/L
Direct Brown 95	16071-86-6	0.009	ug/L
Epichlorohydrin	106-89-8	8	ug/L
Ethyl acrylate	140-88-5	2	ug/L
Ethylene dibromide	106-93-4	0.001	ug/L
Ethylene thiourea	96-45-7	2	ug/L
Folpet	133-07-3	20	ug/L
Furazolidone	67-45-8	0.02	ug/L
Furium	531-82-8	0.002	ug/L
Furmecyclox	60568-05-0	3	ug/L
Heptachlor	76-44-8	0.02	ug/L
Heptachlor epoxide	1024-57-3	0.009	ug/L
Hexachlorobenzene	118-74-1	0.05	ug/L
Hexachlorocyclohexane (alpha)	319-84-6	0.001	ug/L
Hexachlorocyclohexane (technical)	608-73-1	0.05	ug/L
Hexachlorodibenzo-p-dioxin, mix	34465-46-8	0.00001	ug/L
Hydrazine/hydrazine sufate	302-01-2/10034-93-2	0.03	ug/L
Lindane	58-89-9	0.06	ug/L
Methylene Chloride	75-09-2	5	ug/L
Mirex	2385-85-5	0.05	ug/L
Nitrofurazone	59-87-0	0.06	ug/L
N-Nitrosodiethanolamine	1116-54-7	0.03	ug/L
N-Nitrosodiethylamine	55-18-5	0.0005	ug/L
N-Nitrosodimethylamine	62-75-9	0.002	ug/L
N-Nitroso-di-n-butylamine	924-16-3	0.02	ug/L
N-Nitroso-di-n-propylamine	621-64-7	0.01	ug/L
N-Nitrosodiphenylamine	86-30-6	17	ug/L
N-Nitroso-N-methylethylylamine	10595-95-6	0.004	ug/L
N-Nitrosopyrrolidine	930-55-2	0.04	ug/L
o-Chloronitrobenzene	88-73-3	3	ug/L
o-Phenylenediamine	95-54-5	0.005	ug/L
o-Toluidine	95-53-4	0.2	ug/L
p,a,a,a-Tetrachlorotoluene	5216-25-1	0.004	ug/L
PAHs [Benzo(a)pyrene]		0.01	ug/L
PBBs	59536-65-1	0.01	ug/L
PCBs c	27323-18-8	0.01	ug/L
p-Chloronitrobenzene	100-00-5	5	ug/L
Propylene oxide	75-56-9]	0.01	ug/L
Tetrachloroethylene	127-18-4	0.8	ug/L
Toxaphene c	8001-35-2	0.08	ug/L
Trichloroethylene (TCE)	79-01-6	3	ug/L
Trimethyl phosphate	512-56-1	2	ug/L
Vinyl chloride	75-01-4	0.02	ug/L

NOTES: pCi/L=picocuries per liter
mg/L=milligrams per liter
ug/L=micrograms per liter
*Ground Water Quality Criteria=173-200 WAC Water Quality Standards for Ground Waters of the State of Washington

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TABLE 16
CEDAR HILLS REGIONAL LANDFILL.
LAB DATA REVIEW - SUSPECT DATA
(Data Collected from Jan 01, 2022 to March 31, 2022)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value	Cause of Unuseability
No Suspect Data for 1Q2022						

See Data Qualifier List for Qualifier Information.

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APPENDIX A

Potentiometric Surface Maps and Aquifer Flow Calculations

King County
Water and Land Resources Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 5600
Seattle, WA 98104-3855
206-477-4800 Fax 206-296-0192
TTY Relay: 711

TECHNICAL MEMORANDUM

May 17, 2022

TO: Subrina Tahsin, Engineer II, Facility Engineering and Science Section, Solid Waste Division, Department of Natural Resources and Parks (DNRP)

FM: Eric Ferguson and Sevin Bilir, Science and Technical Support Section, Water and Land Resources Division, DNRP

RE: Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations
First Quarter 2022 Results
Cedar Hills Regional Landfill, King County, Washington
Project No. 1126980 – Task 25.106

The King County Water and Land Resources Division (WLRD) submits this memorandum report on groundwater conditions during the first quarter of 2021 for the regional aquifer beneath the Cedar Hills Regional Landfill (Landfill), in accordance with the *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations* (WLRD, 2022). King County Solid Waste Division (SWD) personnel measured regional aquifer groundwater levels at the Landfill on January 5, 2022. These measurements were received by WLRD on March 3, 2022, and were used to:

1. Evaluate the potentiometric groundwater surface elevation for the regional aquifer;
2. Determine the groundwater flow direction and horizontal gradient for the regional aquifer; and
3. Calculate the groundwater velocity of the regional aquifer.

There are no significant changes in the interpreted groundwater conditions for the regional aquifer in this quarter, when compared to the report submitted for the fourth quarter of 2021.

Groundwater Elevation Data

The SWD measured regional aquifer groundwater level measurements at 43 monitoring wells during the first quarter of 2022. These wells are completed in the regional aquifer as referred to in *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill* (Aspect, 2010) and in *Area 8 Development, Monitoring Well Replacement Report* (HDR, 2021).

Table A-1 lists the groundwater monitoring well identifications, locations, construction details, measured depth to groundwater levels, and calculated groundwater elevations for monitoring wells screened in the regional aquifer. A total of 25 wells had measured water levels within ten feet of the top of the screened interval and were used for mapping potentiometric surface contours. With the exception of one well, MW-76, water levels in these wells are within less two feet of measured water levels in the fourth quarter 2021. The average difference measured in these wells is 0.25 ft lower than those measured in the fourth quarter of 2021.

Figure A-1 shows calculated groundwater elevations at well locations and interpreted groundwater potentiometric surface contours for the regional aquifer based on measurements taken on January 5, 2022.

Direction of Groundwater Flow

Interpreted groundwater flow directions in the regional aquifer, based on measurements taken on January 5, 2022, are shown in Figure A-1. Calculated groundwater elevations during the first quarter of 2022 indicate that groundwater in the regional aquifer generally flows to the north with minor components of flow of the following:

- north-northwest and north-northeast to northeast in the *northern portion* of the Landfill,
- north-northwest beneath the *central portion* of the Landfill, and
- northwest and north-northeast beneath the *southern portion* of the Landfill.

Table A-2 lists the flow direction for each portion of the regional aquifer beneath the Landfill based on measurements taken on January 5, 2022, and mapping of groundwater elevation contours. Flow directions for the regional aquifer in the first quarter of 2021 are similar to those for the fourth quarter of 2021.

Groundwater Parameters

Table A-2 presents a summary of the groundwater parameters. Mean horizontal hydraulic conductivity and effective porosity values were based on the ranges referred to in *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill* (Aspect, 2010). The mean horizontal hydraulic conductivity for the regional aquifer beneath the Landfill is 60 feet per day (ft/d) in the

northern and central portions and 0.18 ft/d in the southern portion of the regional aquifer beneath the Landfill (Aspect, 2010). Average effective porosities are 24 and 26 percent, respectively, for the same areas (Aspect, 2010).

Gradients

The hydraulic gradient for the regional aquifer was determined using potentiometric surface maps (Figure A-1). Table A-2 lists the gradients of regional aquifer for the northern, central and southern portions beneath the Landfill.

The hydraulic calculated gradient is greatest under the southern portion of the Landfill (0.013 ft/ft) and slightly lower under the rest of the Landfill based on measurements made during the first quarter of 2022. The gradients calculated for the regional aquifer in the first quarter of 2022 are within the range of gradients calculated during the fourth quarter of 2021.

Groundwater Velocities

Average horizontal groundwater velocities for the regional aquifer beneath the Landfill, are based on spatial differences in aquifer parameters, hydraulic gradients, and calculations using the following formula:

where:

$$v = \frac{1}{n_{eff}} K \frac{\Delta H}{\Delta L}$$

v = Groundwater velocity [L/t]

n_{eff} = Effective porosity [dimensionless]

K = Hydraulic conductivity [L/t]

$\frac{\Delta H}{\Delta L}$ = Hydraulic gradient [L/L]

Table A-2 summarizes the groundwater parameters used to calculate a groundwater velocity for the regional aquifer in the northern, central and southern portions beneath the Landfill. The mean horizontal groundwater velocities for the regional aquifer beneath the Landfill, are lowest under the southern portion of the Landfill (0.009 ft/d) and much greater under the rest of the Landfill (up to 2.25 ft/d under the central portion). The velocities calculated for the regional aquifer in the first quarter of 2022 are within the range of groundwater velocities calculated during the fourth quarter of 2021.

References

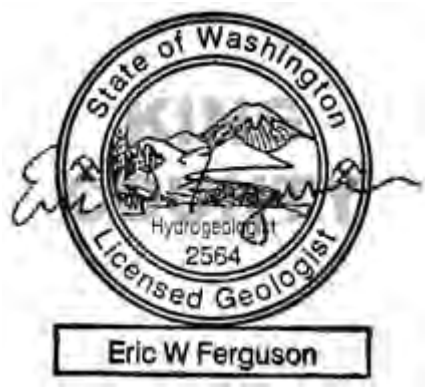
Aspect Consulting, LLC. (Aspect). 2010. Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill. Unpublished work. April 30.

HDR Engineering, Inc. (HDR). 2021. Area 8 Development, Monitoring Well Replacement Report. Prepared in association with Udaloy Environmental Consulting (UEC). Cedar Hills Regional Landfill. Contract No. E00284E12. July.

King County Water and Land Resources Division (WLRD). 2022. Proposal for 2022 Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations; King County Closed Landfills (Cedar Falls, Enumclaw, Hobart, and Vashon Island) and Cedar Hills Regional Landfill. February 18.

Thank you for the opportunity to provide hydrogeologic services to SWD. If you have any questions, please feel free to contact me at 206-477-4690 or Sevin (206.477.4646); eric.ferguson@kingcounty.gov or sevin.bilir@kingcounty.gov.

Sincerely,



Eric Ferguson, WA LHG
Water Quality Planner III- hydrogeologist
King County Water and Land Resources Division

Enclosures:

Table A-1: Well Details and Groundwater Elevations – First Quarter 2022

Table A-2: Groundwater Parameters – Regional Aquifer – First Quarter 2022

Figure A-1: Groundwater Potentiometric Surface Map – First Quarter 2022 – Regional Aquifer

Table A-1: Well Details and Groundwater Elevations – First Quarter 2022

Cedar Hills Regional Landfill
King County, Washington

							January 5, 2022	
	Well Identification	Easting[1]	Northing[1]	Top of Casing Elevation[2]	Top of Screen Elevation[2]	Bottom of Screen Elevation[2]	Measured Depth to Water[3]	Groundwater Elevations[2]
		ft	ft	ft MSL	ft MSL	ft MSL	ft	ft MSL
Wells with water levels within 10 ft of the top of screen	MW-60	1701154.47	167873.20	567.15	334.81	325.81	227.67	339.48
	MW-64	1701980.27	168772.19	596.55	334.03	320.23	266.35	330.20
	MW-66	1699750.19	174250.32	531.28	294.39	280.59	239.55	291.73
	MW-67	1701776.69	172610.65	516.43	297.80	284.00	221.39	295.04
	MW-68	1701917.32	170609.35	647.07	311.29	292.29	332.14	314.93
	MW-72	1698229.92	170987.71	671.87	303.63	294.03	361.85	310.02
	MW-73	1698954.95	174995.59	485.70	288.11	278.81	192.45	293.25
	MW-74R	1700386.85	173813.79	531.26	289.90	280.40	240.99	290.27
	MW-76	1700376.23	167193.13	491.71	351.06	341.56	134.07	357.64
	MW-81	1702568.87	172113.99	493.66	309.19	300.19	184.80	308.86
	MW-82	1699553.72	167725.31	474.85	348.88	339.38	124.78	350.07
	MW-83	1697939.89	167212.27	496.81	350.19	340.69	146.84	349.97
	MW-84	1698602.89	173894.54	530.80	292.46	282.96	237.00	293.80
	MW-85	1701828.95	173694.52	531.76	282.56	273.06	246.43	285.33
	MW-86	1701331.25	174917.90	536.04	283.43	274.63	250.29	285.75
	MW-87	1700670.27	173493.76	537.31	283.68	274.38	248.94	288.37
	MW-88	1701807.87	174303.06	513.68	281.52	272.22	227.92	285.76
	MW-93	1702259.35	169851.24	632.15	319.87	310.07	309.78	322.37
	MW-94	1698674.21	167210.22	495.51	357.22	348.52	142.35	353.16
	MW-95	1697265.32	169426.92	571.54	314.60	305.90	251.90	319.64
	MW-100	1700791.72	169610.46	620.32	319.06	309.06	298.50	321.82
	MW-106	1702536.99	173461.69	475.47	280.04	270.04	190.85	284.62
	MW-113	1698238.80	168478.70	531.09	334.79	325.09	190.60	340.49
	MW-114	1698892.70	167919.80	490.45	353.65	344.05	141.64	348.81
	MW-115	1698960.70	167225.80	484.87	352.87	343.27	131.50	353.37
Wells with water levels greater than 10 ft above the top of screen	MW-21	1697901.86	173876.38	420.66	263.22	255.22	126.12	294.54
	MW-22	1701844.34	173088.17	517.09	236.02	231.22	232.70	284.39
	MW-24	1699582.39	167767.76	475.99	286.76	281.76	145.75	330.24
	MW-43	1701274.23	174327.14	547.06	245.63	235.63	263.74	283.32
	MW-54	1702154.28	168435.53	580.43	250.25	228.25	278.75	301.68
	MW-56	1698980.77	167214.82	480.33	323.15	313.15	127.37	352.96
	MW-57	1699993.32	167201.99	456.64	326.65	311.65	100.98	355.66
	MW-58A	1699006.59	167207.16	479.27	270.05	260.05	150.02	329.25
	MW-59	1699983.91	167193.44	457.13	285.08	275.08	124.60	332.53
	MW-65	1701602.10	167146.55	545.83	317.71	308.91	210.08	335.75
	MW-75	1701059.70	173432.42	532.40	271.10	261.00	246.10	286.30
	MW-80	1701309.78	172964.99	530.41	279.17	269.67	239.74	290.67
	MW-89	1701799.57	174319.44	512.82	229.20	219.90	232.27	280.55
	MW-90	1702203.13	174300.67	502.22	235.16	226.16	221.48	280.74
	MW-91	1701023.09	173423.94	532.02	260.81	240.71	247.22	284.80
	MW-99	1702556.06	172098.73	493.64	221.77	212.77	199.96	293.68
	WS-NPW-1	1701906.96	171138.99	646.33	282.80	267.90	333.58	312.75
	WS-NPW-3	1701922.88	170663.28	645.81	285.00	273.90	331.94	313.87
Other	MW-69[4]	1698061.86	172400.20	653.69	293.57	279.97	NM	NM

Notes:

1. Water level measurements made by SWD personnel.
2. Reference datum for northing and easting coordinates is the North American Datum of 1927 (NAD 27).
3. Elevations reported in feet (ft) above mean sea level (MSL) based on the National Geodetic Vertical Datum of 1929 (NGVD 29).
4. MW-69 due to be repaired in near future.

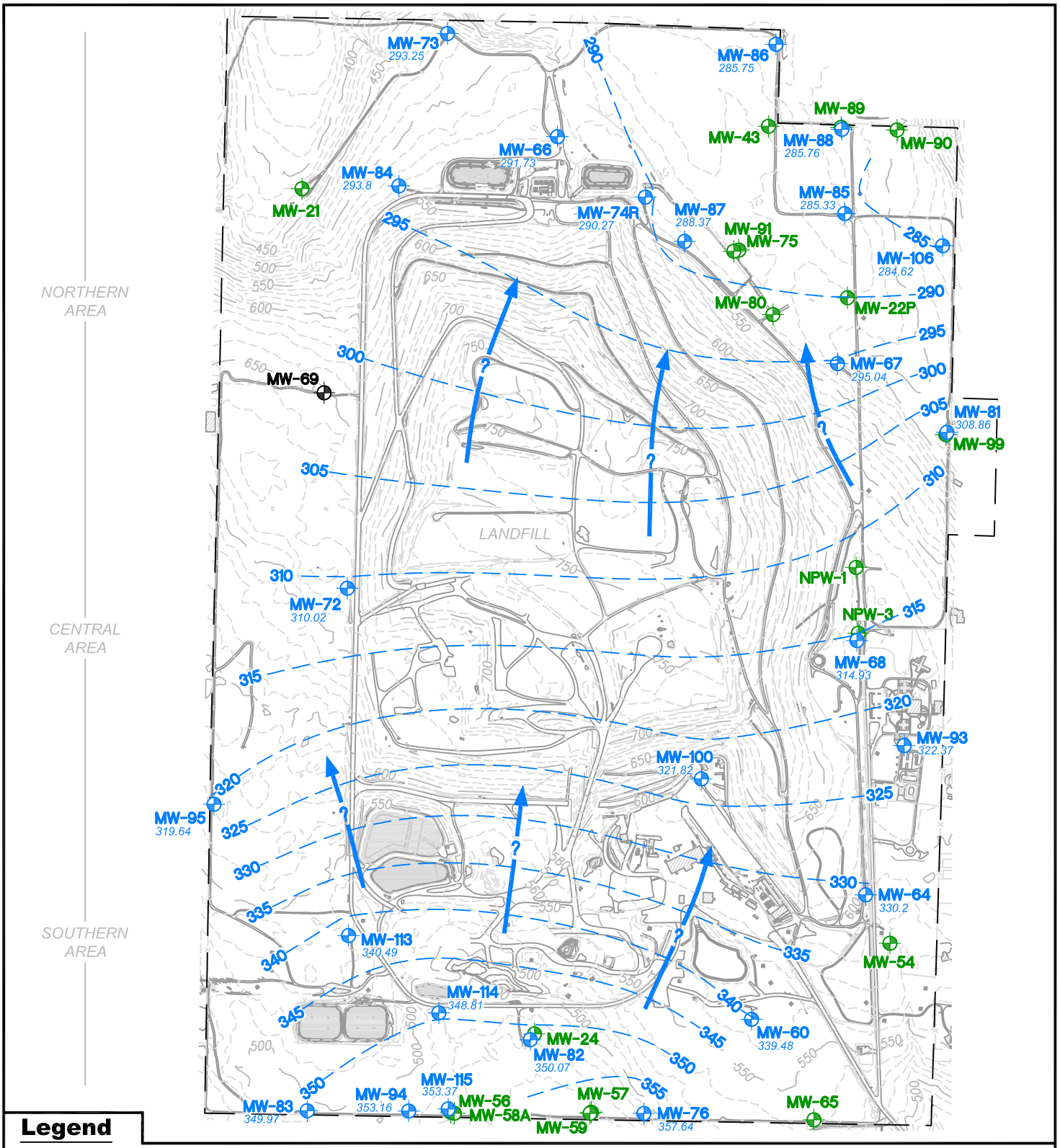
NM Not measured.
NA Not Applicable

Table A-2: Groundwater Parameters – Regional Aquifer
First Quarter 2022
Cedar Hills Regional Landfill
King County, Washington

					First Quarter 2022 - January 5, 2022		
Regional Aquifer Zone Beneath the Landfill	Horizontal Hydraulic Conductivity[1,2] (K)			Effective Porosity[1] (n_{eff})	Horizontal Hydraulic Gradient[3] (DH/DL)	Horizontal Groundwater Velocity (v)	General Groundwater Flow Direction
	Range	cm/s	ft/d		ft/ft	ft/d	
Northern	Minimum	2.10E-03	6	24%	0.0070	0.18	NNW, N, NNE, NE
	Maximum	4.20E-02	120			3.50	
	Mean	2.10E-02	60			1.75	
Central	Minimum	2.10E-03	6	24%	0.0090	0.23	N, NNW
	Maximum	4.20E-02	120			4.50	
	Mean	2.10E-02	60			2.25	
Southern	Minimum	6.40E-06	0.018	26%	0.013	0.001	NW, N, NNE
	Maximum	6.40E-04	1.8			0.090	
	Mean	6.40E-05	0.18			0.009	

Notes:
1. Horizontal hydraulic conductivity values and effective porosity values from Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill (Aspect, 2010).
2. Hydraulic gradients calculated using the potentiometric surface map shown on Figure A-1.
3. Mean hydraulic conductivity values are the geometric mean of the high and low values.

NNE north-northeast; NNW north-northwest; NE, northeast; NW northwest; N, north



Legend

- **MW-X** XXX.XX — Well completed in Regional Aquifer with water levels within the screen or within 10 feet of the top of screen. *Elevation (feet mean sea level (MSL))*
- **MW-X** — Wells completed in Regional Aquifer with water levels more than 10 feet above the top of screen. *Elevation (feet MSL)*
- **MW-X** — Wells completed in Regional Aquifer - Data not used or no measurement this quarter.
- 300 — Regional Aquifer Groundwater Elevation Contour *(feet MSL)*.
- ? — Inferred Horizontal Groundwater Flow Path
- Pond
- Road
- Ditch
- Fence
- King County Landfill Property
- Building

N

0 1000 2000 Feet

Contour Interval 10 Feet

Notes:

1. Groundwater measurements made on January, 2022.
2. Only wells completed in the Regional Aquifer with well screen tops within 10 feet of the water table were used for contouring.

Locations surveyed on North American Datum of 1927 (NAD 27).

Elevations reported in feet above mean sea level based on the National Geodetic Vertical Datum of 1929 (NGVD 29).

Basemap Layer Data: King County Solid Waste Division

King County

Groundwater Potentiometric Surface Map
First Quarter 2022 - Regional Aquifer
Cedar Hills Regional Landfill
King County, Washington

DATE: March 2022	PROJECT NO. 1126980
DESIGNED BY: SB	
DRAWN BY: KK	FIGURE NO. A-1
REVISED BY: SB	

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APPENDIX B

Field and Analytical Test Results

Groundwater Field and Analytical Data

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Groundwater Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground-Water Elevation (msl)	Comment
MW-100	1/5/2022	620.32	298.5	321.82	
MW-101	1/5/2022	474.72	29.51	445.21	
MW-101	1/19/2022	474.72	30.09	444.63	
MW-102	1/5/2022	552.48	44.43	508.05	
MW-102	1/18/2022	552.48	43.16	509.32	
MW-103	1/5/2022	639.08	11.99	627.09	
MW-103	1/12/2022	639.08	12.47	626.61	
MW-104	1/5/2022	629.68	26.04	603.64	
MW-105	1/5/2022	521.23	18.37	502.86	
MW-107	1/5/2022	589.029	26.7	562.33	
MW-107	1/13/2022	589.03	26.53	562.5	
MW-108	1/5/2022	612.258	14.16	598.1	
MW-108	1/14/2022	612.26	18.21	594.05	
MW-109	1/5/2022	638.728	6.87	631.86	
MW-109	1/14/2022	638.73	6.26	632.47	
MW-110	1/5/2022	641.742	3.14	638.6	
MW-110	1/11/2022	641.74	4.14	637.6	
MW-111	1/5/2022	643.797	7.28	636.52	
MW-111	1/13/2022	643.8	7.57	636.23	
MW-112	1/5/2022	638.929	12.81	626.12	
MW-112	1/18/2022	638.93	12.52	626.41	
MW-113	1/5/2022	531.09	190.6	340.49	
MW-113	1/10/2022	531.09	189.7	341.39	
MW-114	1/5/2022	490.45	141.64	348.81	
MW-114	1/10/2022	490.45	141.78	348.67	
MW-115	1/5/2022	484.87	131.5	353.37	
MW-115	1/10/2022	484.87	131.25	353.62	
MW-21	1/5/2022	420.66	126.12	294.54	
MW-24	1/5/2022	475.99	145.75	330.24	
MW-30A	1/5/2022	568.43	28.01	540.42	
MW-30A	1/19/2022	568.43	27.64	540.79	
MW-47	1/5/2022	634.6	16.73	617.87	
MW-47	1/19/2022	634.6	16.43	618.17	
MW-50	1/5/2022	637.02	29.71	607.31	
MW-56	1/5/2022	480.33	127.37	352.96	
MW-59	1/5/2022	457.13	124.6	332.53	
MW-59	1/10/2022	457.13	124.44	332.69	
MW-62	1/5/2022	556.21	49.73	506.48	
MW-62	1/18/2022	556.21	49.05	507.16	
MW-64	1/5/2022	596.55	266.35	330.2	

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Groundwater Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground-Water Elevation (msl)	Comment
MW-65	1/5/2022	545.83	210.08	335.75	
MW-66	1/5/2022	531.28	239.55	291.73	
MW-66	1/6/2022	531.28	138.86	392.42	
MW-67	1/5/2022	516.43	221.39	295.04	
MW-68	1/5/2022	647.07	332.14	314.93	
MW-68	1/12/2022	647.07	332.5	314.57	
MW-69	1/5/2022	653.69			
MW-72	1/5/2022	671.87	361.85	310.02	
MW-72	1/7/2022	671.87	360.98	310.89	
MW-73	1/5/2022	485.7	192.45	293.25	
MW-74R	1/5/2022	531.26	240.99	290.27	
MW-74R	1/7/2022	531.26	239.98	291.28	
MW-75	1/5/2022	532.4	246.1	286.3	
MW-75	1/7/2022	532.4	245.18	287.22	
MW-76	1/5/2022	491.71	134.07	357.64	
MW-80	1/5/2022	530.41	239.74	290.67	
MW-80	1/12/2022	530.41	239.22	291.19	
MW-81	1/5/2022	493.66	184.8	308.86	
MW-81	1/6/2022	493.66	184.04	309.62	
MW-82	1/5/2022	474.85	124.78	350.07	
MW-83	1/5/2022	496.81	146.84	349.97	
MW-83	1/10/2022	496.81	145.7	351.11	
MW-84	1/5/2022	530.8	237	293.8	
MW-84	1/7/2022	530.8	236.05	294.75	
MW-85	1/5/2022	531.76	246.43	285.33	
MW-85	1/10/2022	531.76	246.3	285.46	
MW-86	1/5/2022	536.04	250.29	285.75	
MW-86	3/2/2022	536.04	249.4	286.64	
MW-87	1/5/2022	537.31	248.94	288.37	
MW-87	1/10/2022	537.31	248.83	288.48	
MW-88	1/5/2022	513.68	227.92	285.76	
MW-89	1/5/2022	512.82	232.27	280.55	
MW-90	1/5/2022	502.22	221.48	280.74	
MW-93	1/5/2022	632.15	309.78	322.37	
MW-93	1/10/2022	632.15	309.78	322.37	
MW-94	1/5/2022	495.51	142.35	353.16	
MW-94	1/10/2022	495.51	142.04	353.47	
MW-95	1/5/2022	571.54	251.9	319.64	
MW-99	1/5/2022	493.64	199.96	293.68	
MW-EB6	1/5/2022	589.61	25.9	563.71	
MW-EB6	1/11/2022	589.61	25.55	564.06	

Environmental Monitoring Data

Data Collected from jJan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Groundwater Field Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	pH (Field) (std. Units)	Conductance (Field) (umhos/cm)	Temperature (Field) (^{o}C)	Purge Volume (Field) (gal)	Dissolved Oxygen (Field) (mg/L)	ORP (Field) mV	Turbidity (Field) NTU
MW-101	W101220119-	1/19/2022	6.93	393.7	9.74	3.5			3.75
MW-102	W102220118-	1/18/2022	6.3	187	9.34	3.25	11.08	398.3	6.05
MW-103	W103220112-	1/12/2022	7.65	223.5	10.1	7.25	10.26	226.9	13.5
MW-107	W107220113-	1/13/2022	5.67	219	11.2	0.8	0.53	53.8	0.9
MW-108	W108220114-	1/14/2022	6.97	312	10.61	0.13	10.04	152.3	6.2
MW-109	W109220114-	1/14/2022	7.38	4078.6	9.96	7.25			40.4
MW-110	W110220111-	1/11/2022	6.38	586.9	11.97	7.26			12.8
MW-111	W111220113-	1/13/2022	5.86	95.1	12.31	7.32			2.18
MW-112	W112220118-	1/18/2022	7.06	299	11.15	0.75	1.61	254.3	0.36
MW-113	W113220110-	1/10/2022	7.07	342	9.85	6	0.42	-27.9	0.64
MW-114	W114220110-	1/10/2022	6.6	260.3	9.28	2.2	4.63	256.9	0.32
MW-115	W115220110-	1/10/2022	6.51	262.9	9.68	4	2.88	100.4	0.17
MW-30A	W30A220119-	1/19/2022	6.29	212.4	12.08	7.75			3.83
MW-47	W47-220119-	1/19/2022	6.6	806.5	11.74	26.5	4.19	7.9	0.38
MW-59	W59-220110-	1/10/2022	6.79	206.4	9.74	7	0.06	-66.8	0.59
MW-62	W62-220118-	1/18/2022	5.96	142.5	9.97	2.4			2.58
MW-66	W66-220106-	1/6/2022	6.69	184.4	9.31	5	5.23	311	2.03
MW-68	W68-220112-	1/12/2022	6.84	238.2	9.8	9.5	0.32	96.8	2.71
MW-72	W72-220107-	1/7/2022	6.96	279.5	10.08	5	0.79	194.6	19
MW-74R	W74R220107-	1/7/2022	6.86	437	9.4	5	6.39	287	0.91
MW-75	W75-220107-	1/7/2022	6.89	338.8	9.14	5	0.53	1.6	2.11
MW-80	W80-220112-	1/12/2022	7	271.9	9.463	6	0.47	2	3.61
MW-81	W81-220106-	1/6/2022	6.76	148	9.2	3.5	5.65	304.5	0.49
MW-83	W83-220110-	1/10/2022	6.56	591	10.38	4.75	0.52	256.1	0.67
MW-84	W84-220107-	1/7/2022	6.87	178	9.39	6	0.39	463.8	0.28
MW-85	W85-220110-	1/10/2022	6.94	316.1	9.27	4.75	2.65	-12	0.19
MW-86	W86-220302R	3/2/2022	6.84	183.4	9.11	4	1.38	224	15.3
MW-87	W87-220110-	1/10/2022	6.76	445.7	10.68	3.5	2.05	-2	465
MW-93	W93-220110-	1/10/2022	7.11	261.4	10.81	4.75	1.38	-21.5	1.57
MW-94	W94-220110-	1/10/2022	6.31	310.2	9.28	3.75	1.82	214.8	0.65
MW-EB6	WEB6220111-	1/11/2022	6.25	81.9	9.75	5.04			6.69

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Groundwater Conventionals Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Alkalinity, Bicarbonate ($CaHCO_3$) (mg/L)	Alkalinity, Total ($CaCO_3$) (mg/L)	Ammonia, (NH_3) (mg/L)	Chloride (mg/L)	Nitrate-Nitrogen, (NO_3 as N) (mg/L)	Specific Conductance (umhos/cm)	Sulfate (SO4) (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)
MW-101	W101220119-	1/19/2022		228	0.0072 T	2.38	0.042	441	2.8	291	4.18	297	6.2
MW-102	W102220118-	1/18/2022	3/26/1900	86.9	< 0.002 U	3.78	1.16	218	9.76	146	0.73 T	147	1.5
MW-103	W103220112-	1/12/2022	4/24/1900	115	0.0021 T	4.77	0.036 T	265	10	159	0.61 T	167	6.1
MW-107	W107220113-	1/13/2022	4/11/1900	102	0.368	5.33	0.01 T	245	5.89	132	5.05	137	0.9 T
MW-108	W108220114-	1/14/2022	4/14/1900	105	< 0.002 U	1.63	0.673	346	70.8	254	0.61 T	261	< 0.5 U
MW-109	W109220114-	1/14/2022	11/29/1907	2890	< 0.2 U	3.9 T	< 0.5 U	4630	27.3	3330	252 S	3340	3.52
MW-110	W110220111-	1/11/2022	1/18/1901	384	0.0169	1.8	< 0.01 U	714	4.86	412	2.42	447	42
MW-111	W111220113-	1/13/2022	1/24/1900	24.3	< 0.002 U	1.14	2.8	115	13	86.7	0.71 T	88	12.3
MW-112	W112220118-	1/18/2022	5/22/1900	143	0.0052 T	6.03	0.116	368	33.8	237	0.68 T	238	< 0.5 U
MW-113	W113220110-	1/10/2022		144	0.0147	29.9	< 0.01 U	401	11.2	220	1.76	227	1.2
MW-114	W114220110-	1/10/2022		99.8	< 0.002 U	21.3	2.04	303	7.76	170	0.7 T	171	< 0.5 U
MW-115	W115220110-	1/10/2022		93.8	< 0.002 U	25.5	0.766	305	10	173	1.13	187	< 0.5 U
MW-30A	W30A220119-	1/19/2022	4/2/1900	93.9	< 0.002 U	2.26	5.05	255	8.65	174	0.65 T	174	< 0.5 U
MW-47	W47-220119-	1/19/2022	4/26/1901	482	0.0215	9.2	< 0.01 U	934	13.6	555	4.08	565	1.8
MW-59	W59-220110-	1/10/2022		75	0.0055 T	13	< 0.01 U	229	16.3	114	< 0.5 U	128	0.9 T
MW-62	W62-220118-	1/18/2022		64.2	< 0.002 U	3.57	1.56	174	8.03	117	0.94 T	120	2.05
MW-66	W66-220106-	1/6/2022		83.6	< 0.002 U	4.32	0.395	215	14.2	116	< 0.5 U	121	2.2
MW-68	W68-220112-	1/12/2022	4/26/1900	117	0.0174	3.12	< 0.01 U	279	14.9	147	< 0.5 U	153	0.9 T
MW-72	W72-220107-	1/7/2022		124	0.017	8.13	< 0.01 U	338	31.4	186	< 0.5 U	183	11.3
MW-74R	W74R220107-	1/7/2022		203	< 0.002 U	22.7	0.488	516	30.5	281	0.8 T	297	< 0.5 U
MW-75	W75-220107-	1/7/2022		114	0.0086 T	12.4	< 0.01 U	395	63.6	231	< 0.5 U	248	2.3
MW-80	W80-220112-	1/12/2022	4/27/1900	118	0.0079 T	4.45	0.017 T	314	29.5	181	< 0.5 U	181	4.4
MW-81	W81-220106-	1/6/2022		58.5	< 0.002 U	5.19	1.47	173	11.6	90	< 0.5 U	90	< 0.5 U
MW-83	W83-220110-	1/10/2022		227	< 0.002 U	69.4	0.916	699	13	429	6.93	464	< 0.5 U
MW-84	W84-220107-	1/7/2022		82	0.0023 T	5.86	0.193	220	16.1	110	< 0.5 U	119	< 0.51 U
MW-85	W85-220110-	1/10/2022		155	< 0.002 U	9.91	0.101	393	33.1	218	< 0.5 U	216	< 0.53 U
MW-87	W87-220110-	1/10/2022		119	0.0168	17.9	< 0.01 U	541	133	290	5.44	707	518
MW-93	W93-220110-	1/10/2022		117.0	0.0582	2.64	< 0.01 U	321	37.5	168	0.6 T	188	1.03
MW-94	W94-220110-	1/10/2022		130	< 0.002 U	29.4	0.142	366	5.83	209	3.7	219	< 0.5 U
MW-EB6	WEB6220111-	1/11/2022	2/12/1900	43.5	0.0159	0.626	0.196	105	4.74	68	1.06	76	8

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Groundwater Metals Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Antimony Dissolved (mg/L)	Antimony Total (mg/L)	Arsenic Dissolved (mg/L)	Arsenic Total (mg/L)	Barium Dissolved (mg/L)	Barium Total (mg/L)	Beryllium Dissolved (mg/L)	Beryllium Total (mg/L)	Cadmium Dissolved (mg/L)	Cadmium Total (mg/L)
MW-101	W101220119-	1/19/2022	0.0003 U	0.0003 U	0.0102	0.0118	0.0184	0.0185	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-102	W102220118-	1/18/2022	0.0003 U	0.0003 U	0.000218	0.000249	0.00371	0.00432	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-103	W103220112-	1/12/2022	0.0003 U	0.0003 U	0.00834	0.00896	0.00825	0.0131	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-107	W107220113-	1/13/2022	0.0003 U	0.0003 U	0.00694	0.00685	0.0114	0.0113	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-108	W108220114-	1/14/2022	0.0003 U	0.0003 U	0.00194	0.00195	0.0099	0.0096	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-109	W109220114-	1/14/2022	0.00101	0.00112	0.0847	0.093	0.145	0.151	0.000919	0.000987	5E-05 U	0.000102
MW-110	W110220111-	1/11/2022	0.0003 U	0.0003 U	0.00227	0.0111	0.0232	0.0547	0.0001 U	0.000101	0.0000798	0.000179
MW-111	W111220113-	1/13/2022	0.0003 U	0.0003 U	0.000547	0.000614	0.00536	0.00573	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-112	W112220118-	1/18/2022	0.0003 U	0.0003 U	0.00321	0.00325	0.00898	0.00884	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-113	W113220110-	1/10/2022	0.0003 U	0.0003 U	6.45E-04	0.000628	0.00281	0.0025	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-114	W114220110-	1/10/2022	0.0003 U	0.0003 U	0.000304	0.000291	0.00209	0.00187	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-115	W115220110-	1/10/2022	0.0003 U	0.0003 U	0.0002	0.000174	0.00124	0.00107	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-30A	W30A220119-	1/19/2022	0.0003 U	0.0003 U	0.000554	0.000617	0.00394	0.00417	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-47	W47-220119-	1/19/2022	0.0003 U	0.0003 U	0.000727	0.000808	0.0317	0.0304	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-59	W59-220110-	1/10/2022	0.0003 U	0.0003 U	0.00048	0.000491	0.00474	0.00432	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-62	W62-220118-	1/18/2022	0.0003 U	0.0003 U	0.000171	0.000202	0.00241	0.00272	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-66	W66-220106-	1/6/2022	0.0003 U	0.0003 U	0.000766	0.0008	0.00403	0.00452	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-68	W68-220112-	1/12/2022	0.0003 U	0.0003 U	0.00859	0.0211	0.0105	0.0105	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-72	W72-220107-	1/7/2022	0.0003 U	0.0003 U	0.0000812	0.000162	0.0116	0.0135	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-74R	W74R220107-	1/7/2022	0.0003 U	0.0003 U	0.000463	0.000507	0.0121	0.0117	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-75	W75-220107-	1/7/2022	0.0003 U	0.0003 U	0.000426	0.000411	0.0133	0.0138	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-80	W80-220112-	1/12/2022	0.0003 U	0.0003 U	0.00272	0.00339	0.0139	0.0144	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-81	W81-220106-	1/6/2022	0.0003 U	0.0003 U	0.000582	0.000583	0.00346	0.00347	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-83	W83-220110-	1/10/2022	0.0003 U	0.0003 U	0.000387	0.000362	0.0128	0.0118	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-84	W84-220107-	1/7/2022	0.0003 U	0.0003 U	0.000355	0.000357	0.00556	0.00549	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-85	W85-220110-	1/10/2022	0.0003 U	0.0003 U	0.000737	0.000747	0.00811	0.00724	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-86	W86-220302R	3/2/2022		0.0003 U		0.00193		0.00615		0.0001 U		5E-05 U
MW-87	W87-220110-	1/10/2022	0.0003 U	0.0015	0.000991	0.308	0.0292	0.2	0.0001 U	0.00228	5E-05 U	0.000273
MW-93	W93-220110-	1/10/2022	0.0003 U	0.0003 U	0.00154	0.00159	0.00762	0.00817	0.0001 U	0.0001 U	5E-05 U	0.0000595
MW-94	W94-220110-	1/10/2022	0.0003 U	0.0003 U	0.000136	0.000125	0.00251	0.00227	0.0001 U	0.0001 U	5E-05 U	5E-05 U
MW-EB6	WEB6220111-	1/11/2022	0.0003 U	0.0003 U	0.000968	0.00131	0.00536	0.00711	0.0001 U	0.0001 U	5E-05 U	5E-05 U

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Groundwater Metals Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Calcium Dissolved (mg/L)	Calcium Total (mg/L)	Chromium Dissolved (mg/L)	Chromium Total (mg/L)	Cobalt Dissolved (mg/L)	Cobalt Total (mg/L)	Copper Dissolved (mg/L)	Copper Total (mg/L)	Iron Dissolved (mg/L)	Iron Total (mg/L)	Lead Dissolved (mg/L)	Lead Total (mg/L)
MW-101	W101220119-	1/19/2022	48.9	50.9	0.0002 U	0.000322	0.000275	2.74E-04	0.0002 U	0.0002 U	0.591	0.632	0.0001 U	0.0001 U
MW-102	W102220118-	1/18/2022	22.3	22.2	0.000283	0.000381	5E-05 U	0.0000868	0.000447	0.000774	0.01 U	0.133	0.0001 U	0.0001 U
MW-103	W103220112-	1/12/2022	23.7	23.9	0.0002 U	0.000967	5E-05 U	0.000278	0.000655	0.00277	0.01 U	0.382	0.0001 U	0.000415
MW-107	W107220113-	1/13/2022	28	27.6	0.000531	0.000557	0.00475	0.00456	0.0012	0.00182	4.99	4.9	0.0001 U	0.0001 U
MW-108	W108220114-	1/14/2022	22.5	22.9	0.000691	6.76E-04	5E-05 U	5E-05 U	0.000671	0.000578	0.01 U	0.0162	0.0001 U	0.0001 U
MW-109	W109220114-	1/14/2022	37.6	38.1	0.159	1.65E-01	0.00224	0.00268	0.0215	0.0549	15.5	17.1	0.00225	0.00447
MW-110	W110220111-	1/11/2022	69.7	70.1	0.0002 U	1.68E-03	0.00114	0.00599	0.000628	0.00334	0.0176	2.14	0.0001 U	0.00044
MW-111	W111220113-	1/13/2022	10	9.88	0.00164	1.65E-03	5E-05 U	5E-05 U	0.0002 U	0.000252	0.01 U	0.0689	0.0001 U	0.0001 U
MW-112	W112220118-	1/18/2022	31.8	31.8	0.000588	0.000579	5E-05 U	5E-05 U	0.000222	0.000203	0.01 U	0.01 U	0.0001 U	0.0001 U
MW-113	W113220110-	1/10/2022	39.6	37.7	0.0002 U	0.0002 U	0.0000505	5E-05 U	0.0002 U	0.0002 U	1.46	1.31	0.0001 U	0.0001 U
MW-114	W114220110-	1/10/2022	30.6	29.3	0.0002 U	0.0002 U	1.84E-04	0.000209	0.0002 U	0.000212	0.01 U	0.01 U	0.0001 U	0.0001 U
MW-115	W115220110-	1/10/2022	31.4	30.2	0.0002 U	0.0002 U	5.32E-05	0.0000506	0.000236	0.000226	0.01 U	0.01 U	0.0001 U	0.0001 U
MW-30A	W30A220119-	1/19/2022	22.1	22.1	0.000671	8.81E-04	5E-05 U	0.0000645	0.000242	0.000477	0.01 U	0.134	0.0001 U	0.0001 U
MW-47	W47-220119-	1/19/2022	112	112	0.0002 U	2.32E-04	0.000289	0.000287	0.0002 U	0.00022	0.612	0.728	0.0001 U	0.0001 U
MW-59	W59-220110-	1/10/2022	19.7	19.2	0.0002 U	0.0002 U	5E-05 U	5E-05 U	0.0002 U	0.0002 U	5.03	4.73	0.0001 U	0.0001 U
MW-62	W62-220118-	1/18/2022	18.2	18.3	0.000245	0.000419	0.0000519	0.0000976	0.000502	0.000733	0.01 U	0.12	0.0001 U	0.000157
MW-66	W66-220106-	1/6/2022	17.3	17.2	0.0002 U	0.000205	5E-05 U	0.000056	0.0002 U	0.000216	0.01 U	0.0888	0.0001 U	0.0001 U
MW-68	W68-220112-	1/12/2022	26.7	26.2	0.0002 U	0.0002 U	0.000208	0.000215	0.0002 U	0.000444	0.446	0.746	0.0001 U	0.0001 U
MW-72	W72-220107-	1/7/2022	33.1	32.9	0.0002 U	0.000217	5E-05 U	5E-05 U	0.0002 U	0.000218	2.66	5.26	0.0001 U	0.0001 U
MW-74R	W74R220107-	1/7/2022	47.5	47.3	0.0002 U	0.0002 U	5E-05 U	5E-05 U	0.000204	0.000535	0.0125	0.055	0.0001 U	0.0001 U
MW-75	W75-220107-	1/7/2022	35	34.7	0.0002 U	0.0002 U	5E-05 U	5E-05 U	0.0002 U	0.0002 U	2.63	2.56	0.0001 U	0.0001 U
MW-80	W80-220112-	1/12/2022	31.3	31.6	0.0002 U	0.0002 U	5E-05 U	5E-05 U	0.0002 U	0.0002 U	1.83	2.27	0.0001 U	0.0001 U
MW-81	W81-220106-	1/6/2022	15.3	15.3	0.0002 U	0.0002 U	5E-05 U	5E-05 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.0001 U	0.0001 U
MW-83	W83-220110-	1/10/2022	79.2	79.8	0.000201	0.000207	0.000296	0.000272	0.00397	0.00406	0.01 U	0.01 U	0.0001 U	0.0001 U
MW-84	W84-220107-	1/7/2022	17.9	17.8	0.0002 U	0.0002 U	5E-05 U	5E-05 U	0.0002 U	0.0002 U	0.01 U	0.0107	0.0001 U	0.0001 U
MW-85	W85-220110-	1/10/2022	37.2	35.3	0.0002 U	0.0002 U	5E-05 U	5E-05 U	0.0002 U	0.000225	0.01 U	0.01 U	0.0001 U	0.0001 U
MW-86	W86-220302R	3/2/2022		16.8		0.000621		5E-05 U		0.00547		2.23		0.0001 U
MW-87	W87-220110-	1/10/2022	50.7	51.2	0.0002 U	0.0082	0.000147	0.000549	0.0002 U	0.0122	4.69	226	0.0001 U	0.0043
MW-93	W93-220110-	1/10/2022	32.9	31.1	0.000284	0.000383	0.0000568	0.000264	0.000356	0.0012	0.01 U	0.0629	0.0001 U	0.000178
MW-94	W94-220110-	1/10/2022	38	36.4	0.0002 U	0.0002 U	0.000127	0.000114	0.00149	0.0015	0.01 U	0.01 U	0.0001 U	0.0001 U
MW-EB6	WEB6220111-	1/11/2022	7.14	7.12	0.0002 U	0.000959	0.000117	0.000189	0.00238	0.00454	0.0218	0.412	0.0001 U	0.000258

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Groundwater Metals Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Magnesium Dissolved (mg/L)	Magnesium Total (mg/L)	Manganese Dissolved (mg/L)	Manganese Total (mg/L)	Mercury Dissolved (mg/L)	Mercury Total (mg/L)	Nickel Dissolved (mg/L)	Nickel Total (mg/L)	Potassium Dissolved (mg/L)	Potassium Total (mg/L)
MW-101	W101220119-	1/19/2022	29.4	30	1.08	1.14	5E-05 U	5E-05 U	0.00353	0.00357	2.67	2.69
MW-102	W102220118-	1/18/2022	8.06	7.99	0.000318	0.00221	5E-05 U	5E-05 U	0.000595	0.000708	1.39	1.4
MW-103	W103220112-	1/12/2022	10.9	10.7	0.00444	0.135	5E-05 U	5E-05 U	0.000246	0.00106	2.59	2.67
MW-107	W107220113-	1/13/2022	8.32	8.09	4.3	4.21	5E-05 U	5E-05 U	0.00967	0.00941	2.52	2.46
MW-108	W108220114-	1/14/2022	9.18	9.34	0.000274	0.000597	5E-05 U	5E-05 U	0.000355	0.000347	1.37	1.37
MW-109	W109220114-	1/14/2022	18.1	18	2.53	2.57	5E-05 U	0.0000753	0.0209	0.024	2.35	2.52
MW-110	W110220111-	1/11/2022	37.2	36.9	1.3	4.27	5E-05 U	5E-05 U	0.00527	0.0088	3.41	3.39
MW-111	W111220113-	1/13/2022	2.99	2.81	0.00237	0.00301	5E-05 U	5E-05 U	0.00231	0.00197	0.329	0.332
MW-112	W112220118-	1/18/2022	15.8	15.6	0.0226	0.0253	5E-05 U	5E-05 U	0.000265	0.000241	2.98	3.01
MW-113	W113220110-	1/10/2022	21.5	20.8	0.485	0.438	5E-05 U	5E-05 U	0.000298	0.000316	2.22	1.97
MW-114	W114220110-	1/10/2022	14.9	14	0.000251	0.000485	5E-05 U	5E-05 U	0.000371	0.000404	2.34	2.12
MW-115	W115220110-	1/10/2022	13.6	13.2	0.00269	0.00248	5E-05 U	5E-05 U	0.000352	0.000374	2.06	1.87
MW-30A	W30A220119-	1/19/2022	12.5	12.2	0.000112	0.00163	5E-05 U	5E-05 U	0.00075	0.000864	1.53	1.5
MW-47	W47-220119-	1/19/2022	55.8	56.3	0.948	0.958	5E-05 U	5E-05 U	0.0012	0.00127	5.02	5.09
MW-59	W59-220110-	1/10/2022	11.9	11.8	0.127	0.114	5E-05 U	5E-05 U	0.000139	0.000608	1.25	1.15
MW-62	W62-220118-	1/18/2022	4.43	4.37	0.000804	0.00347	5E-05 U	5E-05 U	0.000443	0.000542	0.9	0.909
MW-66	W66-220106-	1/6/2022	13.2	13	0.000231	0.00377	5E-05 U	5E-05 U	0.000206	0.000312	1.21	1.21
MW-68	W68-220112-	1/12/2022	14.3	14.5	0.289	0.293	5E-05 U	5E-05 U	0.00043	0.000441	1.6	1.65
MW-72	W72-220107-	1/7/2022	19.2	19.3	0.357	0.382	5E-05 U	5E-05 U	0.000131	0.000198	2.02	2.03
MW-74R	W74R220107-	1/7/2022	34.3	34.1	0.000187	0.000619	5E-05 U	5E-05 U	0.000949	0.00098	2.18	2.18
MW-75	W75-220107-	1/7/2022	24.2	24.2	0.246	0.248	5E-05 U	5E-05 U	0.0001 U	0.0001 U	2.1	2.1
MW-80	W80-220112-	1/12/2022	16.4	16.1	0.301	0.317	5E-05 U	5E-05 U	0.0001 U	0.000106	1.65	1.65
MW-81	W81-220106-	1/6/2022	8.11	7.99	0.00013	0.00113	5E-05 U	5E-05 U	0.00017	0.000241	0.908	0.904
MW-83	W83-220110-	1/10/2022	33.1	30	0.00903	0.0509	5E-05 U	5E-05 U	0.00226	0.00213	4.14	3.86
MW-84	W84-220107-	1/7/2022	13	12.9	0.00153	0.00212	5E-05 U	5E-05 U	0.000478	0.000483	1.28	1.28
MW-85	W85-220110-	1/10/2022	23.1	22.2	0.00113	0.00107	5E-05 U	5E-05 U	0.000222	0.00038	1.85	1.66
MW-86	W86-220302R	3/2/2022		11.2		0.0155		5E-05 U		0.000173 D		1.31
MW-87	W87-220110-	1/10/2022	33.4	31	0.537	0.686	5E-05 U	0.0001 U	0.000199	0.0015	2.6	2.29
MW-93	W93-220110-	1/10/2022	16.7	16.4	0.136	0.207	5E-05 U	5E-05 U	0.000278	0.000499	1.61	1.46
MW-94	W94-220110-	1/10/2022	16.9	16.3	0.000835	0.000978	5E-05 U	5E-05 U	0.000781	0.000695	2.85	2.58
MW-EB6	WEB6220111-	1/11/2022	3.72	3.74	0.00324	0.00818	5E-05 U	5E-05 U	0.00185	0.00218	0.884	0.898

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Groundwater Metals Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Selenium Dissolved (mg/L)	Selenium Total (mg/L)	Silver Dissolved (mg/L)	Silver Total (mg/L)	Sodium Dissolved (mg/L)	Sodium Total (mg/L)	Thallium Dissolved (mg/L)	Thallium Total (mg/L)	Vanadium Dissolved (mg/L)	Vanadium Total (mg/L)	Zinc Dissolved (mg/L)	Zinc Total (mg/L)
MW-101	W101220119-	1/19/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	16.6	16.1	7.5E-05 U	7.5E-05 U	0.000382	0.000466	0.0006	0.000815
MW-102	W102220118-	1/18/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	12.2	11.9	7.5E-05 U	7.5E-05 U	0.00108	0.00129	0.0005 U	0.000649
MW-103	W103220112-	1/12/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	13.7	14.1	7.5E-05 U	7.5E-05 U	0.00181	0.00262	0.00145	0.0047
MW-107	W107220113-	1/13/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	6.08	6.01	7.5E-05 U	7.5E-05 U	0.00157	0.00159	0.00432	0.00405
MW-108	W108220114-	1/14/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	33.6	31	7.5E-05 U	7.5E-05 U	0.0035	0.00359	0.000632	0.000522
MW-109	W109220114-	1/14/2022	0.00254	0.00301	0.0000435	0.0000688	1180 D	1180 D	7.5E-05 U	7.5E-05 U	0.552 D	0.572 D	0.00386	0.00689
MW-110	W110220111-	1/11/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	38.4	37.4	7.5E-05 U	7.5E-05 U	0.00125	0.00525	0.000657	0.00408
MW-111	W111220113-	1/13/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	7.09	7.04	7.5E-05 U	7.5E-05 U	0.000867	0.00103	0.0005 U	0.00054
MW-112	W112220118-	1/18/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	26.3	26	7.5E-05 U	7.5E-05 U	1.10E-03	0.00108	0.000606	0.0005 U
MW-113	W113220110-	1/10/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	9.37	8.81	7.5E-05 U	7.5E-05 U	0.000112	8.47E-05	0.0005 U	0.0005 U
MW-114	W114220110-	1/10/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	6.84	6.47	7.5E-05 U	7.5E-05 U	0.000996	0.000854	0.0005 U	0.0005 U
MW-115	W115220110-	1/10/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	7.48	7.07	7.5E-05 U	7.5E-05 U	0.000709	0.000578	0.0005 U	0.0005 U
MW-30A	W30A220119-	1/19/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	12.3	12.1	7.5E-05 U	7.5E-05 U	0.00247	0.00275	0.0005 U	0.000707
MW-47	W47-220119-	1/19/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	17	17	7.5E-05 U	7.5E-05 U	0.000284	0.000298	0.0005 U	0.0005 U
MW-59	W59-220110-	1/10/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	6.61	6.21	7.5E-05 U	7.5E-05 U	7.5E-05 U	7.5E-05 U	0.000619	0.0005
MW-62	W62-220118-	1/18/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	11.6	11.5	7.5E-05 U	7.5E-05 U	0.000692	0.00084	0.00233	0.00181
MW-66	W66-220106-	1/6/2022	0.000854	0.000989	4E-05 U	4E-05 U	7.28	7.24	7.5E-05 U	7.5E-05 U	0.000677	0.000784	0.0005 U	0.0014
MW-68	W68-220112-	1/12/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	8.5	8.37	7.5E-05 U	7.5E-05 U	0.000212	0.000427	0.0005 U	0.0005 U
MW-72	W72-220107-	1/7/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	8.1	8.28	7.5E-05 U	7.5E-05 U	7.5E-05 U	0.0000821	0.000736	0.00141
MW-74R	W74R220107-	1/7/2022	0.000565	0.000578	4E-05 U	4E-05 U	11.9	11.8	7.5E-05 U	7.5E-05 U	0.000659	0.000674	0.0005 U	0.0005 U
MW-75	W75-220107-	1/7/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	9.1	9.23	7.5E-05 U	7.5E-05 U	0.000091	7.5E-05 U	0.0005 U	0.0005 U
MW-80	W80-220112-	1/12/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	7.66	7.66	7.5E-05 U	7.5E-05 U	7.5E-05 U	0.0000829	0.00728	0.00695
MW-81	W81-220106-	1/6/2022	0.00087	0.000808	4E-05 U	4E-05 U	6.67	6.5	7.5E-05 U	7.5E-05 U	0.00155	0.00162	0.000798	0.00068
MW-83	W83-220110-	1/10/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	16	14.6	7.5E-05 U	7.5E-05 U	0.000971	0.000896	0.000636	0.0005 U
MW-84	W84-220107-	1/7/2022	0.000528	0.000528	4E-05 U	4E-05 U	7.18	7.22	7.5E-05 U	7.5E-05 U	0.000571	0.000492	0.00255	0.00284
MW-85	W85-220110-	1/10/2022	0.000809	0.000795	4E-05 U	4E-05 U	10.1	9.37	7.5E-05 U	7.5E-05 U	0.00105	0.000939	0.0005 U	0.000915
MW-86	W86-220302R	3/2/2022		0.0005 U		4E-05 U		6.74		7.5E-05 U		0.000153		0.00229
MW-87	W87-220110-	1/10/2022	0.0005 U	0.00899	4E-05 U	8E-05 U	10.8	9.68	7.5E-05 U	0.00015 U	0.000225	0.0573	0.0005 U	0.0171
MW-93	W93-220110-	1/10/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	9.48	9	7.5E-05 U	7.5E-05 U	0.00227	0.00228	0.00376	0.0134
MW-94	W94-220110-	1/10/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	9.81	9.45	7.5E-05 U	7.5E-05 U	0.00116	0.00107	0.0005 U	0.0005 U
MW-EB6	WEB6220111-	1/11/2022	0.0005 U	0.0005 U	4E-05 U	4E-05 U	10.3	9.84	7.5E-05 U	7.5E-05 U	0.00528	0.006	0.00168	0.0027

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill — Groundwater Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	1,1,1,2-Tetrachloroethane ug/l 630-20-6	1,1,1-Trichloroethane ug/l 71-55-6	1,1,2,2-Tetrachloroethane ug/l 79-34-5	1,1,2-Trichloroethane ug/l 79-00-5	1,1-Dichloroethane ug/l 75-34-3	1,1-Dichloroethene ug/l 75-35-4	1,1-Dichloropropene ug/l 563-58-6	1,2,3-Trichloropropane ug/l 96-18-4	1,2-Dibromo 3-Chloropropane ug/l 96-12-8
MW-101	W101220119-	1/19/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.164 JT	0.1 U		0.1 U	2.5 U
MW-102	W102220118-	1/18/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.199 JT	0.1 U	0.1 U	0.1 U	2.5 U
MW-103	W103220112-	1/12/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-107	W107220113-	1/13/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 JT	0.1 U	0.1 U	0.1 U	2.5 U
MW-108	W108220114-	1/14/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-109	W109220114-	1/14/2022	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U
MW-110	W110220111-	1/11/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.409	0.1 U	0.1 U	0.1 U	2.5 U
MW-111	W111220113-	1/13/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-112	W112220118-	1/18/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-113	W113220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-114	W114220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-115	W115220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-30A	W30A220119-	1/19/2022	0.25 U	0.1 U	0.1 U	0.1 U	1.95	0.1 U	0.1 U	0.1 U	2.5 U
MW-47	W47-220119-	1/19/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.641	0.1 U	0.1 U	0.1 U	2.5 U
MW-59	W59-220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-62	W62-220118-	1/18/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.281	0.1 U		0.1 U	2.5 U
MW-66	W66-220106-	1/6/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-68	W68-220112-	1/12/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-72	W72-220107-	1/7/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-74R	W74R220107-	1/7/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-75	W75-220107-	1/7/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-80	W80-220112-	1/12/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-81	W81-220106-	1/6/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-83	W83-220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-84	W84-220107-	1/7/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-85	W85-220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-87	W87-220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-93	W93-220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-94	W94-220110-	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
MW-EB6	WEB6220111-	1/11/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220107X	1/6/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
VOA TRIP BLANK	VTRP220107Y	1/6/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
VOA TRIP BLANK	VTRP220110X	1/7/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
VOA TRIP BLANK	VTRP220110Y	1/7/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
VOA TRIP BLANK	VTRP220110Z	1/7/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
VOA TRIP BLANK	VTRP220111X	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220112Y	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220112Z	1/10/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220113X	1/11/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220113Z	1/12/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220114X	1/12/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220114X2	1/12/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
VOA TRIP BLANK	VTRP220114Z	1/13/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220118X	1/13/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220118Y	1/13/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220118X2	1/15/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
VOA TRIP BLANK	VTRP220119Z	1/15/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220119X	1/18/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U	2.5 U
VOA TRIP BLANK	VTRP220119Y	1/18/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill — Groundwater Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	1,2-Dibromoethane ug/l 106-93-4	1,2-Dichlorobenzene ug/l 95-50-1	1,2-Dichloroethane ug/l 107-06-2	1,2-Dichloropropane ug/l 78-87-5	1,3-Dichlorobenzene ug/l 541-73-1	1,3-Dichloropropane ug/l 142-28-9	1,4-Dichlorobenzene ug/l 106-46-7	2,2-Dichloropropane ug/l 594-20-7	2-Butanone ug/l 78-93-3	2-Hexanone ug/l 591-78-6	2-Methyl-1-Propanol ug/l 78-83-1	3-Chloropropene ug/l 107-05-1	4-Methyl-2-Pentanone ug/l 108-10-1
MW-101	W101220119-	1/19/2022	0.1 U	0.1 U	0.142 JT	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-102	W102220118-	1/18/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-103	W103220112-	1/12/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-107	W107220113-	1/13/2022	0.1 U	0.254	0.1 U	0.1 U	0.1 U	0.1 U	1.38	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-108	W108220114-	1/14/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-109	W109220114-	1/14/2022	1 U	1 U	1 U	1 U	1 U	1 U	1.53 JT	1 U	2.5 U	5 U	50 U	1 U	25 U
MW-110	W110220111-	1/11/2022	0.1 U	0.907	0.304	0.255	0.1 U	0.1 U	0.218	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-111	W111220113-	1/13/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-112	W112220118-	1/18/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-113	W113220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-114	W114220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-115	W115220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-30A	W30A220119-	1/19/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-47	W47-220119-	1/19/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-59	W59-220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-62	W62-220118-	1/18/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-66	W66-220106-	1/6/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-68	W68-220112-	1/12/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-72	W72-220107-	1/7/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-74R	W74R220107-	1/7/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-75	W75-220107-	1/7/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-80	W80-220112-	1/12/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
MW-81	W81-220106-	1/6/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-83	W83-220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-84	W84-220107-	1/7/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-85	W85-220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-87	W87-220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-93	W93-220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-94	W94-220110-	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
MW-EB6	WEB6220111-	1/11/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220107X	1/6/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
VOA TRIP BLANK	VTRP220107Y	1/6/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
VOA TRIP BLANK	VTRP220110X	1/7/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
VOA TRIP BLANK	VTRP220110Y	1/7/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
VOA TRIP BLANK	VTRP220110Z	1/7/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
VOA TRIP BLANK	VTRP220111X	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220112Y	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220122Z	1/10/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220113X	1/11/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220113Z	1/12/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220114X	1/12/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220114X2	1/12/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
VOA TRIP BLANK	VTRP220114Z	1/13/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220118X	1/13/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220118Y	1/13/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220118X2	1/15/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
VOA TRIP BLANK	VTRP220119Z	1/15/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220119X	1/18/2022	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U			2.5 U
VOA TRIP BLANK	VTRP220119Y	1/18/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U	2.5 U

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill — Groundwater Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Acetone ug/l 67-64-1	Acetonitrile ug/l 75-05-8	Acrolein ug/l 107-02-8	Acrylonitrile ug/l 107-13-1	Benzene ug/l 71-43-2	Bromochloromethane ug/l 74-97-5	Bromodichloromethane ug/l 75-27-4	Bromoform ug/l 75-25-2	Bromomethane ug/l 74-83-9	Carbon Disulfide ug/l 75-15-0	Carbon Tetrachloride ug/l 56-23-5	Chlorobenzene ug/l 108-90-7	Chlorodibromomethane ug/l 124-48-1
MW-101	W101220119-	1/19/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-102	W102220118-	1/18/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-103	W103220112-	1/12/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-107	W107220113-	1/13/2022	2.5 U	5 U	2.5 U	0.035 U	0.633	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	1.67	0.5 U
MW-108	W108220114-	1/14/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-109	W109220114-	1/14/2022	25 U	50 U	25 U	0.35 U	1.52 JT	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1.3 JT	5 U
MW-110	W110220111-	1/11/2022	2.5 U	5 U	2.5 U	0.035 U	0.237	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.576	0.5 U
MW-111	W111220113-	1/13/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-112	W112220118-	1/18/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-113	W113220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-114	W114220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-115	W115220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-30A	W30A220119-	1/19/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-47	W47-220119-	1/19/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-59	W59-220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-62	W62-220118-	1/18/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-66	W66-220106-	1/6/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-68	W68-220112-	1/12/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-72	W72-220107-	1/7/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-74R	W74R220107-	1/7/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-75	W75-220107-	1/7/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-80	W80-220112-	1/12/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-81	W81-220106-	1/6/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-83	W83-220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-84	W84-220107-	1/7/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-85	W85-220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-87	W87-220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-93	W93-220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-94	W94-220110-	1/10/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-EB6	WEB6220111-	1/11/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220107X	1/6/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220107Y	1/6/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220110X	1/7/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220110Y	1/7/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220110Z	1/7/2022	4.21 JT			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220111X	1/10/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220112Y	1/10/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220112Z	1/10/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220113X	1/11/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220113Z	1/12/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220114X	1/12/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220114X2	1/12/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220114Z	1/13/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220118X	1/13/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220118Y	1/13/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220118X2	1/15/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220119Z	1/15/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220119X	1/18/2022	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220119Y	1/18/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill — Groundwater Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Chloroethane ug/l 75-00-3	Chloroform ug/l 67-66-3	Chloromethane ug/l 74-87-3	Chloropropene ug/l 126-99-8	Cis-1,2-Dichloroethene ug/l 156-59-2	Cis-1,3-Dichloropropene ug/l 10061-01-5	Dibromomethane ug/l 74-95-3	Dichlorodifluoromethane ug/l 75-71-8	Ethylbenzene ug/l 100-41-4	M & P Xylene ug/l MPX	Methyl Iodide ug/l 74-88-4	Methyl Methacrylate ug/l 80-62-6
MW-101	W101220119-	1/19/2022	0.124 JT	0.1 U	0.25 U		0.198 JT	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-102	W102220118-	1/18/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.294	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-103	W103220112-	1/12/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-107	W107220113-	1/13/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.195 JT	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-108	W108220114-	1/14/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-109	W109220114-	1/14/2022	1 U	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	2.5 U
MW-110	W110220111-	1/11/2022	0.1 U	0.1 U	0.25 U	0.1 U	4.86	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-111	W111220113-	1/13/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.264	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-112	W112220118-	1/18/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-113	W113220110-	1/10/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-114	W114220110-	1/10/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-115	W115220110-	1/10/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-30A	W30A220119-	1/19/2022	0.1 U	0.1 U	0.25 U	0.1 U	2.6	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-47	W47-220119-	1/19/2022	0.223	0.1 U	0.25 U	0.1 U	1.5	0.25 U	0.1 U	3.56	0.1 U	0.1 U	0.1 U	0.25 U
MW-59	W59-220110-	1/10/2022	0.1 U	0.1 U	0.25 U		1.45	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-62	W62-220118-	1/18/2022	0.1 U	0.1 U	0.25 U		0.544	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-66	W66-220106-	1/6/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-68	W68-220112-	1/12/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-72	W72-220107-	1/7/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-74R	W74R220107-	1/7/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-75	W75-220107-	1/7/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-80	W80-220112-	1/12/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-81	W81-220106-	1/6/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-83	W83-220110-	1/10/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-84	W84-220107-	1/7/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-85	W85-220110-	1/10/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-87	W87-220110-	1/10/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-93	W93-220110-	1/10/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-94	W94-220110-	1/10/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-EB6	WEB6220111-	1/11/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220107X	1/6/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
VOA TRIP BLANK	VTRP220107Y	1/6/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
VOA TRIP BLANK	VTRP220110X	1/7/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
VOA TRIP BLANK	VTRP220110Y	1/7/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
VOA TRIP BLANK	VTRP220110Z	1/7/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
VOA TRIP BLANK	VTRP220111X	1/10/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220112Y	1/10/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220112Z	1/10/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220113X	1/11/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220113Z	1/12/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220114X	1/12/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220114X2	1/12/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
VOA TRIP BLANK	VTRP220114Z	1/13/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220118X	1/13/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220118Y	1/13/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220118X2	1/15/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
VOA TRIP BLANK	VTRP220119Z	1/15/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220119X	1/18/2022	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
VOA TRIP BLANK	VTRP220119Y	1/18/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill — Groundwater Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Methylacrylonitrile ug/l 126-98-7	Methylene Chloride ug/l 75-09-2	O-Xylene ug/l 95-47-6	Propionitrile ug/l 107-12-0	Styrene ug/l 100-42-5	Tetrachloroethene ug/l 127-18-4	Toluene ug/l 108-88-3	Trans-1,2-Dichloroethene ug/l 156-60-5	Trans-1,3-Dichloropropene ug/l 10061-02-6	Trans-1,4-Dichloro-2-Butene ug/l 110-57-6	Trichloroethene ug/l 79-01-6	Trichlorofluoromethane ug/l 75-69-4	Vinyl Acetate ug/l 108-05-4	Vinyl Chloride ug/l 75-01-4
MW-101	W101220119-	1/19/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.418
MW-102	W102220118-	1/18/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.271	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-103	W103220112-	1/12/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-107	W107220113-	1/13/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.114 JT	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.548
MW-108	W108220114-	1/14/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-109	W109220114-	1/14/2022	1 U	25 U	1 U	5 U	1 U	1 U	298	1 U	5 U	5 U	1 U	1 U	1 U	0.241
MW-110	W110220111-	1/11/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.221	0.5 U	0.5 U	0.127 JT	0.1 U	0.1 U	0.155
MW-111	W111220113-	1/13/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.121 JT	0.1 U	0.1 U	0.01 U
MW-112	W112220118-	1/18/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-113	W113220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-114	W114220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	12.2	0.1 U	0.1 U	0.01 U
MW-115	W115220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	5.73	0.1 U	0.1 U	0.01 U
MW-30A	W30A220119-	1/19/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.14 JT	0.1 U	0.1 U	0.5 U	0.5 U	0.943	0.1 U	0.1 U	0.01 U
MW-47	W47-220119-	1/19/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	4.82
MW-59	W59-220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-62	W62-220118-	1/18/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-66	W66-220106-	1/6/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-68	W68-220112-	1/12/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-72	W72-220107-	1/7/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-74R	W74R220107-	1/7/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-75	W75-220107-	1/7/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-80	W80-220112-	1/12/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-81	W81-220106-	1/6/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-83	W83-220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	1.69	0.1 U	0.1 U	0.01 U
MW-84	W84-220107-	1/7/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-85	W85-220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-87	W87-220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-93	W93-220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-94	W94-220110-	1/10/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	2.11	0.1 U	0.1 U	0.01 U
MW-EB6	WEB6220111-	1/11/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220107X	1/6/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220107Y	1/6/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220110X	1/7/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220110Y	1/7/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220110Z	1/7/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220111X	1/10/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220112Y	1/10/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220112Z	1/10/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220113X	1/11/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220113Z	1/12/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220114X	1/12/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220114X2	1/12/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220114Z	1/13/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220118X	1/13/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220118Y	1/13/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220118X2	1/15/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220119Z	1/15/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220119X	1/18/2022		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220119Y	1/18/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U

Storm and Surface Water Field and Analytical Data

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Surface Water Elevation-Staff Gage Measurements
Contact Person: Natalya Usova (206) 263-0608

Staff Gage	Location	Date	Reference Elevation Staff Gage 0' (msl)	Reference Elevation Top of Peizo (msl)	Depth to Water (Peizometer) (feet)	Staff Gage Reading (feet)	Surface Water Elevation (msl)	Comments
SW-G1	SW-W1	1/5/2022	415.38	418.84		0.68	415.84	
SW-G1	SW-W1	2/24/2022	415.38	418.84		0.5	415.84	
SW-G1	SW-W1	3/25/2022	415.38	418.84		0.47	415.84	
SW-G2	SW-N1	1/5/2022	355.68	358.21		0.65	355.88	
SW-G2	SW-N1	2/24/2022	355.68	358.21		0.14	355.88	
SW-G2	SW-N1	3/25/2022	355.68	358.21		0.46	355.88	
SW-G3	SW -V	1/5/2022	466.46	469.88		0.22	466.46	
SW-G3	SW -V	2/24/2022	466.46	469.88	DRY		466.46	
SW-G3	SW -V	3/25/2022	466.46	469.88		0.19	466.46	
SW-G4	Upstream of SW-E1	1/5/2022	502.41	505.85		0.81	502.70	
SW-G4	Upstream of SW-E1	2/24/2022	502.41	505.85	3.34		502.70	
SW-G4	Upstream of SW-E1	3/25/2022	502.41	505.85		0.65	502.70	
SW-G5	SW-E1	1/5/2022	486.92	490.34		1.36	487.51	
SW-G5	SW-E1	2/24/2022	486.92	490.34		0.56	487.51	
SW-G5	SW-E1	3/25/2022	486.92	490.34		0.67	487.51	
SW-G6	Upstream of SW-GS1	1/5/2022	490.72	494.12	2.65		490.72	
SW-G6	Upstream of SW-GS1	2/24/2022	490.72	494.12	3.37		490.72	
SW-G6	Upstream of SW-GS1	3/25/2022	490.72	494.12	4.27		490.72	
SW-G7	SW-S2	1/5/2022	453.03	456.41		1.16	453.78	
SW-G7	SW-S2	2/24/2022	453.03	456.41		0.67	453.78	
SW-G7	SW-S2	3/25/2022	453.03	456.41		0.84	453.78	
SW-G8	Upstream of SW-S1	1/5/2022	510.61	515.56		0.53	510.91	
SW-G8	Upstream of SW-S1	2/24/2022	510.61	515.56		0.15	510.91	
SW-G8	Upstream of SW-S1	3/25/2022	510.61	515.56		0.35	510.91	
SW-G9	SW-S1	1/5/2022	490.93	494.35		1.86	491.57	
SW-G9	SW-S1	2/24/2022	490.93	494.35		0.67	491.57	
SW-G9	SW-S1	3/25/2022	490.93	494.35		0.79	491.57	

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill - Surface Water Field Parameters

Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	pH (Field) (std. Units)	Spec. Conductance (Field) (umho/cm)	Temperature (Field) (^{o}C)	Turbidity (Field) (NTU)	Dissolved Oxygen, (Field) (mg/L)
SW-E1	SE1-220114Q	1/14/2022	7.27	33.5	6.005	1.62	10.97

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Conventionals and Metals Parameters
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Alkalinity, N (mg/L)	Aluminum Dissolved (mg/L)	Aluminum Total (mg/L)	Ammonia As N (mg/L)	Antimony Dissolved (mg/L)	Antimony Total (mg/L)	Arsenic Dissolved (mg/L)	Arsenic Total (mg/L)	Barium Dissolved (mg/L)
SW-E1	SE1-220114Q	1/14/2022	1/11/1900			1/0/1900	< 0.0003	< 0.0003	0.00014	0.000151	0.00256
SW-EMER	SA7SE220308E	3/8/2022	11/23/1901	1/0/1900	1/6/1900	1/29/1900	0.00141	0.0015	0.0282	0.0309	0.0926
SW-GS1	SGS1220120P	1/20/2022				1/0/1900					
SW-N4	SN4-220120P	1/20/2022				0.0766					
SW-SL3	SSL3220120P	1/20/2022				0.0039					
SW-TD1	STD1220114-	1/14/2022	65.9								
SW-TD2	STD2220301-	3/1/2022	13.8								

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Conventionals and Metals Parameters
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Barium Total (mg/L)	Beryllium Dissolved (mg/L)	Beryllium Total (mg/L)	Biological N (mg/L)	Cadmium Dissolved (mg/L)	Cadmium Total (mg/L)	Calcium Dissolved (mg/L)	Calcium Total (mg/L)	Chemical Oxygen N (mg/L)
SW-E1	SE1-220114Q	1/14/2022	0.00297	< 0.0001	< 0.0001		< 0.00005	< 0.00005	4.18	4.14	
SW-EMER	SA7SE220308E	3/8/2022	0.116	< 0.0001	< 0.0001	37.7	< 0.00005	0.0000601	162	155	175
SW-GS1	SGS1220120P	1/20/2022				< 2					
SW-N4	SN4-220120P	1/20/2022				< 2					
SW-SL3	SSL3220120P	1/20/2022				< 2					
SW-TD1	STD1220114-	1/14/2022									< 5
SW-TD2	STD2220301-	3/1/2022									20.4

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Conventionals and Metals Parameters
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Chloride N (mg/L)	Chromium Dissolved (mg/L)	Chromium Total (mg/L)	Cobalt Dissolved (mg/L)	Cobalt Total (mg/L)	Copper Dissolved (mg/L)	Copper Total (mg/L)	Cyanide N (mg/L)
SW-E1	SE1-220114Q	1/14/2022	1.7	< 0.0002	< 0.0002	< 0.00005	< 0.00005	0.000446	0.000535	
SW-EMER	SA7SE220308E	3/8/2022	29.6	0.00252	0.00889	0.00935	0.0119	0.000272	0.0124	< 0.002
SW-GS1	SGS1220120P	1/20/2022								
SW-N4	SN4-220120P	1/20/2022								
SW-SL3	SSL3220120P	1/20/2022								
SW-TD1	STD1220114-	1/14/2022	2.42							
SW-TD2	STD2220301-	3/1/2022	0.25							

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Conventionals and Metals Parameters
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Fluoride N (mg/L)	Hardness T (mg/L)	Iron Dissolved (mg/L)	Iron Total (mg/L)	Lead Dissolved (mg/L)	Lead Total (mg/L)	Magnesium Dissolved (mg/L)	Magnesium Total (mg/L)
SW-E1	SE1-220114Q	1/14/2022			0.0179	0.04	< 0.0001	< 0.0001	0.867	0.892
SW-EMER	SA7SE220308E	3/8/2022	< 0.2	558	9.11	15.5	< 0.0001	0.00176	41.7	41.6
SW-GS1	SGS1220120P	1/20/2022								
SW-N4	SN4-220120P	1/20/2022								
SW-SL3	SSL3220120P	1/20/2022								
SW-TD1	STD1220114-	1/14/2022			0.016	1.16				
SW-TD2	STD2220301-	3/1/2022			0.0624	0.39				

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Conventionals and Metals Parameters
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Manganese Dissolved (mg/L)	Manganese Total (mg/L)	Mercury Dissolved (mg/L)	Mercury Total (mg/L)	Nickel Dissolved (mg/L)	Nickel Total (mg/L)	Nitrate N (mg/L)	Nitrate + Nitrite N (mg/L)	Phosphorus, N (mg/L)
SW-E1	SE1-220114Q	1/14/2022	0.00112	0.00232	< 0.00005	< 0.00005	0.000198	0.000293	0.477		
SW-EMER	SA7SE220308E	3/8/2022	8.34	8.08		< 0.00005	0.0109	0.0172		< 0.01	0.201
SW-GS1	SGS1220120P	1/20/2022									
SW-N4	SN4-220120P	1/20/2022									
SW-SL3	SSL3220120P	1/20/2022									
SW-TD1	STD1220114-	1/14/2022									
SW-TD2	STD2220301-	3/1/2022									

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Conventionals and Metals Parameters
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Potassium Dissolved (mg/L)	Potassium Total (mg/L)	Selenium Dissolved (mg/L)	Selenium Total (mg/L)	Silver Dissolved (mg/L)	Silver Total (mg/L)	Sodium Dissolved (mg/L)	Sodium Total (mg/L)	Specific N (mg/L)
SW-E1	SE1-220114Q	1/14/2022	0.408	0.406	< 0.0005	< 0.0005	< 0.00004	< 0.00004	2.14	2.18	41
SW-EMER	SA7SE220308E	3/8/2022	15.2	14.5	< 0.0005	0.000888	< 0.00004	< 0.00004	46.7	45.3	1380
SW-GS1	SGS1220120P	1/20/2022									
SW-N4	SN4-220120P	1/20/2022									
SW-SL3	SSL3220120P	1/20/2022									
SW-TD1	STD1220114-	1/14/2022									
SW-TD2	STD2220301-	3/1/2022									

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Conventionals and Metals Parameters
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Sulfate N (mg/L)	Sulfide N (mg/L)	Thallium Dissolved (mg/L)	Thallium Total (mg/L)	Tin Dissolved (mg/L)	Tin Total (mg/L)	Total Dissolved N (mg/L)	Total Kjeldahl N (mg/L)	Total Organic N (mg/L)
SW-E1	SE1-220114Q	1/14/2022	1.61		< 0.000075	< 0.000075			28		3.38
SW-EMER	SA7SE220308E	3/8/2022	4.38	0.081	< 0.000075	< 0.000075	< 0.0005	< 0.0005		25.6	41.3
SW-GS1	SGS1220120P	1/20/2022									
SW-N4	SN4-220120P	1/20/2022									
SW-SL3	SSL3220120P	1/20/2022									
SW-TD1	STD1220114-	1/14/2022	61.6								2.3
SW-TD2	STD2220301-	3/1/2022	0.3								6.19

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Conventionals and Metals Parameters
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Total Solids N (mg/L)	Total Suspended N (mg/L)	TOTAL N (mg/L)	VANADIUM Dissolved (mg/L)	VANADIUM Total (mg/L)	VOLATILE N (mg/L)	ZINC Dissolved (mg/L)	ZINC Total (mg/L)
SW-E1	SE1-220114Q	1/14/2022		31 < 1		0.000372	0.000434		0.00107	0.00157
SW-EMER	SA7SE220308E	3/8/2022		265	216	0.00709	0.0201	17	0.000851	0.016
SW-GS1	SGS1220120P	1/20/2022		3						0.00245
SW-N4	SN4-220120P	1/20/2022		1						0.0192
SW-SL3	SSL3220120P	1/20/2022		1.1						0.00331
SW-TD1	STD1220114-	1/14/2022								
SW-TD2	STD2220301-	3/1/2022								

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Volatile Organic Compounds
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	3-,4-Methylphenol mixture 15831-10-4 (ug/L)	Alpha-Terpineol 98-55-5 (ug/L)	Benzoic Acid 65-85-0 (ug/L)	Phenol 108-95-2 (ug/L)
SW-GS1			No sample taken			
SW-N4						
SW-SL3						

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	1,1,1,2-Tetrachloroethane ug/l N	1,1,1-Trichloroethane ug/l N	1,1,2,2-Tetrachloroethane ug/l N	1,1,2-Trichloroethane ug/l N	1,1-Dichloroethane ug/l N	1,1-Dichloroethene ug/l N	1,2,3-Trichloropropane ug/l N	1,2-Dibromo-3-Chloropropane ug/l N	1,2-Dibromoethane ug/l N	1,2-Dichlorobenzene ug/l N	1,2-Dichloroethane ug/l N	1,2-Dichloropropane ug/l N	1,4-Dichlorobenzene ug/l N	2-Butanone ug/l N
SW-E1	1/14/2022	SE1-220114Q	< 0.25	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 2.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 1

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	2-Hexanone ug/l N	4-Methyl-2-Pentanone ug/l N	Acetone ug/l N	Acrylonitrile ug/l N	Benzene ug/l N	Bromochloromethane mg/l N	Bromodichloromethane ug/l N	Bromoform mg/l N	Bromomethane mg/l D	Carbon Disulfide mg/l T	Carbon Tetrachloride mg/l D	Chlorobenzene mg/l T	Chlorodibromomethane mg/l D
SW-E1	1/14/2022	SE1-220114Q	< 0.5	< 2.5	< 2.5	< 0.035	< 0.1	< 0.1	< 0.25	< 0.5	< 0.1	< 0.1	< 0.25	< 0.1	< 0.5

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Chloroethane mg/l T	Chloroform ug/l N	Chloromethane ug/l N	Cis-1,2-Dichloroethene mg/l D	Cis-1,3-Dichloropropene mg/l T	Dibromomethane mg/l N	Dichlorodifluoromethane ug/l N	Ethylbenzene ug/l N	M & P Xylene ug/l N	Methyl Iodide ug/l N	Methylene Chloride mg/l D	O-Xylene mg/l T	Styrene mg/l D
SW-E1	1/14/2022	SE1-220114Q	< 0.1	< 0.1	< 0.25	< 0.1	< 0.25	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 2.5	< 0.1	< 0.1

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Tetrachloroethene	Toluene	Trans-1,2-Dichloroethene	Trans-1,3-Dichloropropene	Trans-1,4-Dichloro-2-Butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	CHROMIUM	CHROMIUM	CIS-1,2-DICHLOROETHENE	-DICHLOROPR	COBALT
												7440-47-3	7440-47-3	156-59-2	10061-01-5	7440-48-4
			mg/l	ug/l	ug/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	ug/l	ug/l	mg/l
			T	N	N	N	N	N	N	N	N	D	T	N	N	D
SW-E1	1/14/2022	SE1-220114Q	< 0.1	< 0.1	< 0.1	< 0.5	< 5	< 0.1	< 0.1	< 0.1	< 0.01					

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	COBALT	COPPER	COPPER	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	DISSOLVED OXYGEN, FIELD	ETHYLBENZENE	IRON	IRON	LEAD	LEAD	M & P XYLENE	MAGNESIUM	MAGNESIUM
			7440-48-4	7440-50-8	7440-50-8	74-95-3	75-71-8	DO-F	100-41-4	7439-89-6	7439-89-6	7439-92-1	7439-92-1	MPX	7439-95-4	7439-95-4
			mg/l	mg/l	mg/l	ug/l	ug/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
			T	D	T	N	N	N	N	D	T	D	T	N	D	T
SW-E1	1/14/2022	SE1-220114Q														

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	MANGANESE	MANGANESE	MERCURY	MERCURY	METHYL IODIDE	METHYLENE CHLORIDE	NICKEL	NICKEL	NITRATE	O-XYLENE	pH, FIELD	PHENOL	POTASSIUM	POTASSIUM
			7439-96-5	7439-96-5	7439-97-6	7439-97-6	74-88-4	75-09-2	7440-02-0	7440-02-0	14797-55-8	95-47-6	pH-F	108-95-2	7440-09-7	7440-09-7
			mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	mg/l	mg/l	mg/l	ug/l	pH units	ug/l	mg/l	mg/l
			D	T	D	T	N	N	D	T	N	N	N	N	D	T
SW-E1	1/14/2022	SE1-220114Q														

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	SELENIUM	SELENIUM	SILVER	SILVER	SODIUM	SODIUM	SPEC COND, FIELD	SPECIFIC CONDUCTANCE	STYRENE	SULFATE	TEMPERATURE, FIELD	TETRACHLOROETHENE	THALLIUM	THALLIUM
			7782-49-2	7782-49-2	7440-22-4	7440-22-4	7440-23-5	7440-23-5	COND-F	COND	100-42-5	14808-79-8	TEMP	127-18-4	7440-28-0	7440-28-0
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	umhos/cm	umhos/cm	ug/l	mg/l	deg c	ug/l	mg/l	mg/l
			D	T	D	T	D	T	N	N	N	N	N	N	D	T
SW-E1	1/14/2022	SE1-220114Q														

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surface Water Elevation Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	TOLUENE	TOTAL DISSOLVED SOLIDS	TOTAL ORGANIC CARBON	TOTAL SOLIDS	TOTAL SUSPENDED SOLIDS	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE
			108-88-3	TDS	TOC	TS	TSS	156-60-5	10061-02-6
			ug/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l
			N	N	N	N	N	N	N
SW-E1	1/14/2022	SE1-220114Q							

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Surfacewater Top Deck Data
Contact Person: Natalya Usova (206) 263-0608

	Sample ID	Date	pH	Conductance	Temperature	Turbidity	Alkalinity, (Total)	Chemical Oxygen Demand	Chloride	Dissolved Oxygen	Iron, (Dissolved)	Iron, (Total)	Sulfate	Total Organic Carbon
			(Field)	(Field)	(Field)	(Field)	(CaCO3)						(SO4)	
			(std. Units)	(umho/cm)	(^{o}C)	(NTU)	(mg/L)	(mg/L)	(mg/L)		(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-TD1	STD1220114-	1/14/2022	7.19	230.7	5.702	27.6	65.9	< 5 U	2.42	12.89	1.16	0.016	61.6	2.3 T
SW-TD2	STD2220301-	3/1/2022	6.89	30.5	10.72	10.7	13.8	20.4	0.25	10.34	0.39	0.0624	0.3	2.3 T

Washington Department of Ecology
Electronic Submission Cover Letter

DEPARTMENT OF ECOLOGY
State of Washington

WQWebDMR - Permit# WAR305034 - DMR Submission Id: 1810171 - 2/14/2022 5:32:56 PM

Company Name	Signer Name	System Name
Goodfellow Bros LLC	Kyle Williams	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for Goodfellow Bros LLC	Copy of Record GoodfellowBrosLLC Monday February 14 2022

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

For Ecology Use Only

q6vEPSu3sL7pDS2o7NS0mtjQwkTJbzu3PzmfCqtoUeC117QavSfV+U5Untmd+K
+u3LFCI/zAO4zLFlBdSKqPe/4GdO/2hRCveG2lQSF4vkA=

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** Queen City Farms Lake (QCFL)

Monitoring Period: 01/01/2022 - 01/31/2022 **Outfall:** CHL - Queen City Farms Lake (QCFL) **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		CHL	CHL
1-Sa	**1/1/22**	M	M
2-Su	**1/2/22**	M	M
2-M	**1/3/22**	20.1	M
2-T	**1/4/22**	M	M
2-W	**1/5/22**	M	M
2-Th	**1/6/22**	M	M
2-F	**1/7/22**	M	M
2-Sa	**1/8/22**	M	M
3-Su	**1/9/22**	M	M
3-M	**1/10/22**	M	M
3-T	**1/11/22**	39.2	M
3-W	**1/12/22**	M	M
3-Th	**1/13/22**	M	M
3-F	**1/14/22**	M	M
3-Sa	**1/15/22**	M	M
4-Su	**1/16/22**	M	M
4-M	**1/17/22**	18.4	M
4-T	**1/18/22**	M	M
4-W	**1/19/22**	M	M
4-Th	**1/20/22**	M	M
4-F	**1/21/22**	M	M
4-Sa	**1/22/22**	M	M
5-Su	**1/23/22**	M	M
5-M	**1/24/22**	11.5	M
5-T	**1/25/22**	M	M
5-W	**1/26/22**	M	M
5-Th	**1/27/22**	M	M
5-F	**1/28/22**	M	M
5-Sa	**1/29/22**	M	M
6-Su	**1/30/22**	M	M
6-M	**1/31/22**	10.2	M
Minimum			M
			BM: >= 6.5 (RO)
Maximum		39.2	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Gravel Filter Berm
	1	Silt Fence
	1	Straw Wattles
	2	Check Dams
	2	Gravel Filter Berm
	2	Silt Fence
	2	Straw Wattles

	3	Check Dams
	3	Gravel Filter Berm
	3	Silt Fence
	3	Straw Wattles
	4	Check Dams
	4	Gravel Filter Berm
	4	Silt Fence
	4	Straw Wattles
	5	Check Dams
	5	Gravel Filter Berm
	5	Silt Fence
	5	Straw Wattles
	6	Check Dams
	6	Gravel Filter Berm
	6	Silt Fence
	6	Straw Wattles

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** gravel pit lake

Monitoring Period: 01/01/2022 - 01/31/2022 **Outfall:** grav - The gravel pit lake infiltrates and has no surface discharge outlet **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C3	C3
1-Sa	**1/1/22**	M	M
2-Su	**1/2/22**	M	M
2-M	**1/3/22**	13.2	M
2-T	**1/4/22**	M	M
2-W	**1/5/22**	M	M
2-Th	**1/6/22**	M	M
2-F	**1/7/22**	M	M
2-Sa	**1/8/22**	M	M
3-Su	**1/9/22**	M	M
3-M	**1/10/22**	M	M
3-T	**1/11/22**	21.1	M
3-W	**1/12/22**	M	M
3-Th	**1/13/22**	M	M
3-F	**1/14/22**	M	M
3-Sa	**1/15/22**	M	M
4-Su	**1/16/22**	M	M
4-M	**1/17/22**	8.48	M
4-T	**1/18/22**	M	M
4-W	**1/19/22**	M	M
4-Th	**1/20/22**	M	M
4-F	**1/21/22**	M	M
4-Sa	**1/22/22**	M	M
5-Su	**1/23/22**	M	M
5-M	**1/24/22**	2.14	M
5-T	**1/25/22**	M	M
5-W	**1/26/22**	M	M
5-Th	**1/27/22**	M	M
5-F	**1/28/22**	M	M
5-Sa	**1/29/22**	M	M
6-Su	**1/30/22**	M	M
6-M	**1/31/22**	2.04	M
Minimum			M
			BM: >= 6.5 (RO)
Maximum		21.1	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Gravel Filter Berm
	2	Check Dams
	2	Gravel Filter Berm
	3	Check Dams
	3	Gravel Filter Berm
	4	Check Dams

	4	Gravel Filter Berm
	5	Check Dams
	5	Gravel Filter Berm
	6	Check Dams
	6	Gravel Filter Berm

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** McDonald Creek

Monitoring Period: 01/01/2022 - 01/31/2022 **Outfall:** McDo - Outfall SW N4 The discharge on the northern boundary drains to McDonald Creek at Lat 47 477875 and Long 122 054943 **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C1	C1	C2	C2
1-Sa	**1/1/22**	M	M	M	M
2-Su	**1/2/22**	M	M	M	M
2-M	**1/3/22**	13.01	M	4.38	M
2-T	**1/4/22**	M	M	M	M
2-W	**1/5/22**	M	M	M	M
2-Th	**1/6/22**	M	M	M	M
2-F	**1/7/22**	M	M	M	M
2-Sa	**1/8/22**	M	M	M	M
3-Su	**1/9/22**	M	M	M	M
3-M	**1/10/22**	M	M	M	M
3-T	**1/11/22**	12.1	M	5.40	M
3-W	**1/12/22**	M	M	M	M
3-Th	**1/13/22**	M	M	M	M
3-F	**1/14/22**	M	M	M	M
3-Sa	**1/15/22**	M	M	M	M
4-Su	**1/16/22**	M	M	M	M
4-M	**1/17/22**	6.24	M	4.95	M
4-T	**1/18/22**	M	M	M	M
4-W	**1/19/22**	M	M	M	M
4-Th	**1/20/22**	M	M	M	M
4-F	**1/21/22**	M	M	M	M
4-Sa	**1/22/22**	M	M	M	M
5-Su	**1/23/22**	M	M	M	M
5-M	**1/24/22**	5.87	M	4.54	M
5-T	**1/25/22**	M	M	M	M
5-W	**1/26/22**	M	M	M	M
5-Th	**1/27/22**	M	M	M	M
5-F	**1/28/22**	M	M	M	M
5-Sa	**1/29/22**	M	M	M	M
6-Su	**1/30/22**	M	M	M	M
6-M	**1/31/22**	3.46	M	3.35	M
Minimum			M		M
			BM: >= 6.5 (RO)		BM: >= 6.5 (RO)
Maximum		12.1	M	5.40	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)	BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Gravel Filter Berm
	1	Silt Fence
	1	Straw Wattles
	1	Triangular Silt Dike
	2	Check Dams

	2	Gravel Filter Berm
	2	Silt Fence
	2	Straw Wattles
	2	Triangular Silt Dike
	3	Check Dams
	3	Gravel Filter Berm
	3	Silt Fence
	3	Straw Wattles
	3	Triangular Silt Dike
	4	Check Dams
	4	Gravel Filter Berm
	4	Silt Fence
	4	Straw Wattles
	4	Triangular Silt Dike
	5	Check Dams
	5	Gravel Filter Berm
	5	Silt Fence
	5	Straw Wattles
	5	Triangular Silt Dike
	6	Check Dams
	6	Gravel Filter Berm
	6	Silt Fence
	6	Straw Wattles
	6	Triangular Silt Dike

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kyle Williams
Signature

2/14/2022 5:32:54 PM
Date

Washington Department of Ecology
Electronic Submission Cover Letter

DEPARTMENT OF ECOLOGY
State of Washington

WQWebDMR - Permit# WAR305034 - DMR Submission Id: 1813498 - 3/14/2022 1:35:48 PM

Company Name	Signer Name	System Name
Goodfellow Bros LLC	Kyle Williams	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for Goodfellow Bros LLC	Copy of Record GoodfellowBrosLLC Monday March 14 2022

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

For Ecology Use Only

vPXFiB0JkkK96VmJG7qCWDNfgPIdRuDfCOd2VbTpM/I4OKVOkKP6A85kWJ579hwqHJRY83wJJi0y0r3KCRxeVRoUxJCB
ziBhLjQqNE3+P78=

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** Queen City Farms Lake (QCFL)

Monitoring Period: 02/01/2022 - 02/28/2022 **Outfall:** CHL - Queen City Farms Lake (QCFL) **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		CHL	CHL
1-T	**2/1/22**	10.24	M
1-W	**2/2/22**	10.26	M
1-Th	**2/3/22**	10.01	M
1-F	**2/4/22**	9.62	M
1-Sa	**2/5/22**	M	M
2-Su	**2/6/22**	M	M
2-M	**2/7/22**	9.02	M
2-T	**2/8/22**	8.76	M
2-W	**2/9/22**	8.24	M
2-Th	**2/10/22**	8.25	M
2-F	**2/11/22**	7.12	M
2-Sa	**2/12/22**	M	M
3-Su	**2/13/22**	M	M
3-M	**2/14/22**	2.80	M
3-T	**2/15/22**	2.89	M
3-W	**2/16/22**	2.94	M
3-Th	**2/17/22**	2.69	M
3-F	**2/18/22**	2.64	M
3-Sa	**2/19/22**	M	M
4-Su	**2/20/22**	M	M
4-M	**2/21/22**	2.28	M
4-T	**2/22/22**	2.30	M
4-W	**2/23/22**	2.21	M
4-Th	**2/24/22**	2.07	M
4-F	**2/25/22**	1.92	M
4-Sa	**2/26/22**	M	M
5-Su	**2/27/22**	M	M
5-M	**2/28/22**	8.67	M
Minimum			M
			BM: >= 6.5 (RO)
Maximum		8.67	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge, M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Gravel Filter Berm
	1	Sediment Trap
	1	Silt Fence
	1	Straw Wattles
	2	Check Dams
	2	Gravel Filter Berm
	2	Sediment Trap
	2	Silt Fence
	2	Straw Wattles
	3	Check Dams

	3	Gravel Filter Berm
	3	Sediment Trap
	3	Silt Fence
	3	Straw Wattles
	4	Check Dams
	4	Gravel Filter Berm
	4	Sediment Trap
	4	Silt Fence
	4	Straw Wattles
	5	Check Dams
	5	Gravel Filter Berm
	5	Sediment Trap
	5	Silt Fence
	5	Straw Wattles

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** gravel pit lake

Monitoring Period: 02/01/2022 - 02/28/2022 **Outfall:** grav - The gravel pit lake infiltrates and has no surface discharge outlet **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C3	C3
1-T	**2/1/22**	2.04	M
1-W	**2/2/22**	1.98	M
1-Th	**2/3/22**	1.90	M
1-F	**2/4/22**	1.96	M
1-Sa	**2/5/22**	M	M
2-Su	**2/6/22**	M	M
2-M	**2/7/22**	1.75	M
2-T	**2/8/22**	1.74	M
2-W	**2/9/22**	1.89	M
2-Th	**2/10/22**	1.96	M
2-F	**2/11/22**	1.96	M
2-Sa	**2/12/22**	M	M
3-Su	**2/13/22**	M	M
3-M	**2/14/22**	5.29	M
3-T	**2/15/22**	5.14	M
3-W	**2/16/22**	5.64	M
3-Th	**2/17/22**	5.75	M
3-F	**2/18/22**	5.72	M
3-Sa	**2/19/22**	M	M
4-Su	**2/20/22**	M	M
4-M	**2/21/22**	5.70	M
4-T	**2/22/22**	5.75	M
4-W	**2/23/22**	5.77	M
4-Th	**2/24/22**	5.80	M
4-F	**2/25/22**	5.84	M
4-Sa	**2/26/22**	M	M
5-Su	**2/27/22**	M	M
5-M	**2/28/22**	24.8	M
Minimum			M
			BM: >= 6.5 (RO)
Maximum		24.8	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge, M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Gravel Filter Berm
	1	Silt Fence
	1	Straw Wattles
	2	Check Dams
	2	Gravel Filter Berm
	2	Silt Fence
	2	Straw Wattles
	3	Check Dams
	3	Gravel Filter Berm

	3	Silt Fence
	3	Straw Wattles
	4	Check Dams
	4	Gravel Filter Berm
	4	Silt Fence
	4	Straw Wattles
	5	Check Dams
	5	Gravel Filter Berm
	5	Silt Fence
	5	Straw Wattles

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** McDonald Creek

Monitoring Period: 02/01/2022 - 02/28/2022 **Outfall:** McDo - Outfall SW N4 The discharge on the northern boundary drains to McDonald Creek at Lat 47 477875 and Long 122 054943 **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C1	C1	C2	C2
1-T	**2/1/22**	3.46	M	3.35	M
1-W	**2/2/22**	3.09	M	3.45	M
1-Th	**2/3/22**	3.08	M	3.42	M
1-F	**2/4/22**	2.99	M	3.34	M
1-Sa	**2/5/22**	M	M	M	M
2-Su	**2/6/22**	M	M	M	M
2-M	**2/7/22**	2.76	M	3.30	M
2-T	**2/8/22**	2.79	M	3.21	M
2-W	**2/9/22**	2.60	M	C	M
2-Th	**2/10/22**	2.49	M	C	M
2-F	**2/11/22**	2.36	M	C	M
2-Sa	**2/12/22**	M	M	M	M
3-Su	**2/13/22**	M	M	M	M
3-M	**2/14/22**	2.18	M	C	M
3-T	**2/15/22**	2.20	M	C	M
3-W	**2/16/22**	2.09	M	C	M
3-Th	**2/17/22**	2.04	M	C	M
3-F	**2/18/22**	1.89	M	C	M
3-Sa	**2/19/22**	M	M	M	M
4-Su	**2/20/22**	M	M	M	M
4-M	**2/21/22**	1.71	M	C	M
4-T	**2/22/22**	1.64	M	C	M
4-W	**2/23/22**	1.30	M	C	M
4-Th	**2/24/22**	1.27	M	C	M
4-F	**2/25/22**	1.21	M	C	M
4-Sa	**2/26/22**	M	M	M	M
5-Su	**2/27/22**	M	M	M	M
5-M	**2/28/22**	47.0	M	6.46	M
Minimum			M		M
			BM: >= 6.5 (RO)		BM: >= 6.5 (RO)
Maximum		47.0	M	6.46	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)	BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge, M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Gravel Filter Berm
	1	Silt Fence
	1	Straw Wattles
	2	Check Dams
	2	Gravel Filter Berm
	2	Silt Fence
	2	Straw Wattles
	3	Check Dams

	3	Gravel Filter Berm
	3	Silt Fence
	3	Straw Wattles
	4	Check Dams
	4	Gravel Filter Berm
	4	Silt Fence
	4	Straw Wattles
	5	Check Dams
	5	Gravel Filter Berm
	5	Silt Fence
	5	Straw Wattles

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kyle Williams
Signature

3/14/2022 1:35:46 PM
Date

Washington Department of Ecology
Electronic Submission Cover Letter

DEPARTMENT OF ECOLOGY
State of Washington

WQWebDMR - Permit# WAR305034 - DMR Submission Id: 1818159 - 4/15/2022 1:02:43 PM

Company Name	Signer Name	System Name
Goodfellow Bros LLC	Kyle Williams	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for Goodfellow Bros LLC	Copy of Record GoodfellowBrosLLC Friday April 15 2022

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

For Ecology Use Only

e+m4dnS/66EVOOjwqE0+VA4Xqq9Lxo7NR8N2g9F
+DkoEo8U3/Wo7f06EhWtqNdUXcitDdAIBroAf5325bD9GDeaamTJ6sq76cqUXiG2q/uw=

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** Queen City Farms Lake (QCFL)

Monitoring Period: 03/01/2022 - 03/31/2022 **Outfall:** CHL - Queen City Farms Lake (QCFL) **Version:** 2

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		CHL	CHL
1-T	**3/1/22**	9.02	M
1-W	**3/2/22**	9.26	M
1-Th	**3/3/22**	9.24	M
1-F	**3/4/22**	10.75	M
1-Sa	**3/5/22**	M	M
2-Su	**3/6/22**	M	M
2-M	**3/7/22**	12.89	M
2-T	**3/8/22**	M	M
2-W	**3/9/22**	M	M
2-Th	**3/10/22**	M	M
2-F	**3/11/22**	M	M
2-Sa	**3/12/22**	M	M
3-Su	**3/13/22**	M	M
3-M	**3/14/22**	7.95	M
3-T	**3/15/22**	M	M
3-W	**3/16/22**	M	M
3-Th	**3/17/22**	M	M
3-F	**3/18/22**	M	M
3-Sa	**3/19/22**	M	M
4-Su	**3/20/22**	M	M
4-M	**3/21/22**	8.48	M
4-T	**3/22/22**	M	M
4-W	**3/23/22**	M	M
4-Th	**3/24/22**	M	M
4-F	**3/25/22**	M	M
4-Sa	**3/26/22**	M	M
5-Su	**3/27/22**	M	M
5-M	**3/28/22**	9.66	M
5-T	**3/29/22**	M	M
5-W	**3/30/22**	M	M
5-Th	**3/31/22**	M	M
Minimum			M
			BM: >= 6.5 (RO)
Maximum		12.89	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Gravel Filter Berm
	1	Silt Fence
	1	Straw Wattles
	1	Triangular Silt Dike
	2	Check Dams
	2	Gravel Filter Berm
	2	Silt Fence

	2	Straw Wattles
	2	Triangular Silt Dike
	3	Check Dams
	3	Gravel Filter Berm
	3	Silt Fence
	3	Straw Wattles
	3	Triangular Silt Dike
	4	Check Dams
	4	Gravel Filter Berm
	4	Silt Fence
	4	Straw Wattles
	4	Triangular Silt Dike
	5	Check Dams
	5	Gravel Filter Berm
	5	Silt Fence
	5	Straw Wattles
	5	Triangular Silt Dike

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** gravel pit lake

Monitoring Period: 03/01/2022 - 03/31/2022 **Outfall:** grav - The gravel pit lake infiltrates and has no surface discharge outlet **Version:** 2

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C3	C3
1-T	**3/1/22**	23.6	M
1-W	**3/2/22**	23.0	M
1-Th	**3/3/22**	21.7	M
1-F	**3/4/22**	21.9	M
1-Sa	**3/5/22**	M	M
2-Su	**3/6/22**	M	M
2-M	**3/7/22**	20.6	M
2-T	**3/8/22**	M	M
2-W	**3/9/22**	M	M
2-Th	**3/10/22**	M	M
2-F	**3/11/22**	M	M
2-Sa	**3/12/22**	M	M
3-Su	**3/13/22**	M	M
3-M	**3/14/22**	12.18	M
3-T	**3/15/22**	M	M
3-W	**3/16/22**	M	M
3-Th	**3/17/22**	M	M
3-F	**3/18/22**	M	M
3-Sa	**3/19/22**	M	M
4-Su	**3/20/22**	M	M
4-M	**3/21/22**	9.89	M
4-T	**3/22/22**	M	M
4-W	**3/23/22**	M	M
4-Th	**3/24/22**	M	M
4-F	**3/25/22**	M	M
4-Sa	**3/26/22**	M	M
5-Su	**3/27/22**	M	M
5-M	**3/28/22**	6.42	M
5-T	**3/29/22**	M	M
5-W	**3/30/22**	M	M
5-Th	**3/31/22**	M	M
Minimum			M
			BM: >= 6.5 (RO)
Maximum		23.6	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Silt Fence
	1	Triangular Silt Dike
	2	Check Dams
	2	Silt Fence
	2	Triangular Silt Dike
	3	Check Dams

	3	Silt Fence
	3	Triangular Silt Dike
	4	Check Dams
	4	Silt Fence
	4	Triangular Silt Dike
	5	Check Dams
	5	Silt Fence
	5	Triangular Silt Dike

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR305034 **Permittee:** Cedar Hills regional Landfill

Facility County: King **Receiving Waterbody:** McDonald Creek

Monitoring Period: 03/01/2022 - 03/31/2022 **Outfall:** McDo - Outfall SW N4 The discharge on the northern boundary drains to McDonald Creek at Lat 47 477875 and Long 122 054943 **Version:** 2

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C1	C1	C2	C2
1-T	**3/1/22**	44.3	M	6.22	M
1-W	**3/2/22**	26.4	M	6.15	M
1-Th	**3/3/22**	21.7	M	5.33	M
1-F	**3/4/22**	22.4	M	5.30	M
1-Sa	**3/5/22**	M	M	M	M
2-Su	**3/6/22**	M	M	M	M
2-M	**3/7/22**	15.4	M	4.18	M
2-T	**3/8/22**	M	M	M	M
2-W	**3/9/22**	M	M	M	M
2-Th	**3/10/22**	M	M	M	M
2-F	**3/11/22**	M	M	M	M
2-Sa	**3/12/22**	M	M	M	M
3-Su	**3/13/22**	M	M	M	M
3-M	**3/14/22**	3.71	M	3.01	M
3-T	**3/15/22**	M	M	M	M
3-W	**3/16/22**	M	M	M	M
3-Th	**3/17/22**	M	M	M	M
3-F	**3/18/22**	M	M	M	M
3-Sa	**3/19/22**	M	M	M	M
4-Su	**3/20/22**	M	M	M	M
4-M	**3/21/22**	5.29	M	2.89	M
4-T	**3/22/22**	M	M	M	M
4-W	**3/23/22**	M	M	M	M
4-Th	**3/24/22**	M	M	M	M
4-F	**3/25/22**	M	M	M	M
4-Sa	**3/26/22**	M	M	M	M
5-Su	**3/27/22**	M	M	M	M
5-M	**3/28/22**	6.99	M	4.04	M
5-T	**3/29/22**	M	M	M	M
5-W	**3/30/22**	M	M	M	M
5-Th	**3/31/22**	M	M	M	M
Minimum			M		M
			BM: >= 6.5 (RO)		BM: >= 6.5 (RO)
Maximum		44.3	M	6.22	M
		BM: <= 25 (RO)	BM: <= 8.5 (RO)	BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: M - Monitoring Is Conditional/Not Req This MP

BMPs

Monitoring Point	Week	BMP
	1	Check Dams
	1	Silt Fence
	1	Straw Wattles
	1	Triangular Silt Dike
	2	Check Dams
	2	Silt Fence

	2	Straw Wattles
	2	Triangular Silt Dike
	3	Check Dams
	3	Silt Fence
	3	Straw Wattles
	3	Triangular Silt Dike
	4	Check Dams
	4	Silt Fence
	4	Straw Wattles
	4	Triangular Silt Dike
	5	Check Dams
	5	Silt Fence
	5	Straw Wattles
	5	Triangular Silt Dike

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kyle Williams
Signature

4/15/2022 1:02:41 PM
Date

Washington Department of Ecology
Electronic Submission Cover Letter

WQWebDMR - Permit# WAR000756 - DMR Submission Id: 1822566 - 5/13/2022 9:48:58 AM

Company Name	Signer Name	System Name
King County Solid Waste Division	Jennifer Keune	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for King County Solid Waste Division	Copy of Record KingCountySolidWasteDivision Friday May 13 2022

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

For Ecology Use Only

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+D8o9cLTOJilR6Wgp4iiKfWCItz2hDGEKxeaBZ7bCtBg1HmqOp0c36vQwM=

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR000756 **Permittee:** CEDAR HILLS REGIONAL LANDFILL

Facility County: King **Receiving Waterbody:** Unnamed stream

Monitoring Period: 01/01/2022 - 03/31/2022 **Outfall:** GS1 - Discharge to unnamed stream (wetland) **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Quarterly Grab	Oil & Grease Yes/No Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly Grab	Total BOD5 Total Milligrams/L (mg/L) Quarterly Grab	Solids (Residue) Total suspended (TSS) Milligrams/L (mg/L) Quarterly Grab	Ammonia Total Milligrams/L (mg/L) Quarterly Grab	Alpha-terpineol (3-Cyclohexene-1-methanol,,alpha,alpha,trimethyl-) Micrograms/L (ug/L) Quarterly Grab	Benzoic Acid Micrograms/L (ug/L) Quarterly Grab	p-Cresol (4-methylphenol) Micrograms/L (ug/L) Quarterly Grab	Phenol Micrograms/L (ug/L) Quarterly Grab	Zinc Total Micrograms/L (ug/L) Quarterly Grab
		GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1
Limit Set		ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
4-Th	**1/20/22**	A	No	A	<2	3	0.0703	<0.472	<9.43	<0.472	<0.472	2.45
Minimum												
Average		A		A								
		BM: <= 25		BM: <= 14								
Maximum												
Month 1 Average					<2	3	0.0703	<0.472	<9.43	<0.472	<0.472	2.45
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 2 Average					M	M	M	M	M	M	M	M
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 3 Average					M	M	M	M	M	M	M	M
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110

Reporting Codes Used: A - Consistent Attainment Of Benchmark, B - Below Detection Limit/No Detection, M - Monitoring Is Conditional/Not Req This MP

Week	Monitoring Point	pH Standard Units Quarterly Grab
		GS1
Limit Set		ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
4-Th	1/20/22	6.94
Minimum		6.94
		>= 6.0 (RO)
Average		
Maximum		6.94
		<= 9.0 (RO)
Month 1 Average		
Month 2 Average		
Month 3 Average		

Permit Number: WAR000756 **Permittee:** CEDAR HILLS REGIONAL LANDFILL

Facility County: King **Receiving Waterbody:** Unnamed stream

Monitoring Period: 01/01/2022 - 03/31/2022 **Outfall:** N4 - Discharge to unnamed stream (McDonald Cr) **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Quarterly Grab	Oil & Grease Yes/No Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly Grab	Total BOD5 Total Milligrams/L (mg/L) Quarterly Grab	Solids (Residue) Total suspended (TSS) Milligrams/L (mg/L) Quarterly Grab	Ammonia Total Milligrams/L (mg/L) Quarterly Grab	Alpha-terpineol (3-Cyclohexene-1-methanol,,alpha,,alpha,,trimethyl-) Micrograms/L (ug/L) Quarterly Grab	Benzoic Acid Micrograms/L (ug/L) Quarterly Grab	p-Cresol (4-methylphenol) Micrograms/L (ug/L) Quarterly Grab	Phenol Micrograms/L (ug/L) Quarterly Grab	Zinc Total Micrograms/L (ug/L) Quarterly Grab
		N4	N4	N4	N4	N4	N4	N4	N4	N4	N4	N4
Limit Set		ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
4-Th	1/20/22	A	No	A	<2	1	0.0766	<0.515	<10.3	<0.515	<0.515	19.2
Minimum												
Average		A		A								
		BM: <= 25		BM: <= 14								
Maximum												
Month 1 Average					<2	1	0.0766	<0.515	<10.3	<0.515	<0.515	19.2
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 2 Average					M	M	M	M	M	M	M	M
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 3 Average					M	M	M	M	M	M	M	M
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110

Reporting Codes Used: A - Consistent Attainment Of Benchmark, B - Below Detection Limit/No Detection, M - Monitoring Is Conditional/Not Req This MP

Week	Monitoring Point	pH Standard Units Quarterly Grab
		N4
	Limit Set	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
4-Th	1/20/22	7.32
Minimum		7.32
		>= 6.0 (RO)
Average		
Maximum		7.32
		<= 9.0 (RO)
Month 1 Average		
Month 2 Average		
Month 3 Average		

Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR000756 **Permittee:** CEDAR HILLS REGIONAL LANDFILL

Facility County: King **Receiving Waterbody:** Unnamed stream

Monitoring Period: 01/01/2022 - 03/31/2022 **Outfall:** SL3 - Discharge to unnamed stream (ditch) **Version:** 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Quarterly Grab	Oil & Grease Yes/No Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly Grab	Total BOD5 Total Milligrams/L (mg/L) Quarterly Grab	Solids (Residue) Total suspended (TSS) Milligrams/L (mg/L) Quarterly Grab	Ammonia Total Milligrams/L (mg/L) Quarterly Grab	Alpha-terpineol (3-Cyclohexene-1-methanol,.,alpha.,alpha.,trimethyl-) Micrograms/L (ug/L) Quarterly Grab	Benzoic Acid Micrograms/L (ug/L) Quarterly Grab	p-Cresol (4-methylphenol) Micrograms/L (ug/L) Quarterly Grab	Phenol Micrograms/L (ug/L) Quarterly Grab	Zinc Total Micrograms/L (ug/L) Quarterly Grab
		SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3
Limit Set		ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
4-Th	1/20/22	A	No	A	<2	1.1	0.0039	<0.51	<10.2	<0.51	<0.51	3.31
Minimum												
Average		A		A								
		BM: <= 25		BM: <= 14								
Maximum												
Month 1 Average					<2	1.1	0.0039	<0.51	<10.2	<0.51	<0.51	3.31
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 2 Average					M	M	M	M	M	M	M	M
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 3 Average					M	M	M	M	M	M	M	M
					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110

Reporting Codes Used: A - Consistent Attainment Of Benchmark, B - Below Detection Limit/No Detection, M - Monitoring Is Conditional/Not Req This MP

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jennifer Keune — 5/13/2022 9:48:56 AM

Signature **Date**

Week	Monitoring Point	pH Standard Units Quarterly Grab
		SL3
	Limit Set	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
4-Th	1/20/22	6.8
Minimum		6.8
		>= 6.0 (RO)
Average		
Maximum		6.8
		<= 9.0 (RO)
Month 1 Average		
Month 2 Average		
Month 3 Average		

Leachate Field and Analytical Data

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Sample Roster
Contact Person: Natalya Usova (206) 263-0608

Leachate Monitoring Activities 3rd Quarter 2021

Station ID	Date	Activity	Sample ID	Comment
LS-A567	1/6/2022	Special Investigation	L567220106I	
LS-A567	2/10/2022	Special Investigation	L567220210I	
LS-A567	3/3/2022	Special Investigation	L567220303I	
LS-A81	1/6/2022	Special Investigation	LA81220106I	
LS-A81	2/10/2022	Special Investigation	LA81220210I	
LS-A81	3/3/2022	Special Investigation	LA81220303I	
LS-CSW	1/6/2022	Special Investigation	LCSW220106I	
LS-CSW	3/2/2022	Duplicate	LCSW220302D	
LS-CSW	3/2/2022	Special Investigation	LCSW220302I	
LS-LEPS	1/4/2022	Monthly Characterization Sample	LEPS220104M	
LS-LEPS	1/4/2022	Permit Sample	LEPS220104P	
LS-LEPS	1/12/2022	Permit Sample	LEPS220112P	
LS-LEPS	1/19/2022	Permit Sample	LEPS220119P	
LS-LEPS	1/26/2022	Permit Sample	LEPS220126P	
LS-LEPS	2/3/2022	Permit Sample	LEPS220203P	
LS-LEPS	2/9/2022	Monthly Characterization Sample	LEPS220209M	
LS-LEPS	2/9/2022	Permit Sample	LEPS220209P	
LS-LEPS	2/16/2022	Permit Sample	LEPS220216P	
LS-LEPS	2/22/2022	Permit Sample	LEPS220222P	
LS-LEPS	3/3/2022	Permit Sample	LEPS220303P	
LS-LEPS	3/7/2022	Monthly Characterization Sample	LEPS220307M	
LS-LEPS	3/7/2022	Permit Sample	LEPS220307P	
LS-LEPS	3/16/2022	Permit Sample	LEPS220316P	
LS-LEPS	3/22/2022	Permit Sample	LEPS220322P	
LS-LEPS	3/29/2022	Permit Sample	LEPS220329P	
LS-MH46N	1/5/2022	Monthly Characterization Sample	L46N220105M	
LS-MH46N	2/9/2022	Monthly Characterization Sample	L46N220209M	
LS-MH46N	3/3/2022	Monthly Characterization Sample	L46N220303M	
LS-PS1A	1/6/2022	Special Investigation	LP1A220106I	
LS-PS1A	2/10/2022	Special Investigation	LP1A220210I	
LS-PS1A	3/2/2022	Special Investigation	LP1A220302I	
LS-PS2A	1/5/2022	Monthly Characterization Sample	LP2A220105M	
LS-PS2A	2/9/2022	Monthly Characterization Sample	LP2A220209M	
LS-PS2A	3/3/2022	Monthly Characterization Sample	LP2A220303M	
LS-PS4	1/6/2022	Special Investigation	LP4-220106I	
LS-PS4	2/10/2022	Special Investigation	LP4-220210I	
LS-PS4	3/2/2022	Special Investigation	LP4-220302I	
LS-V1A	1/5/2022	Monthly Characterization Sample	LV1A220105M	
LS-V1A	2/9/2022	Monthly Characterization Sample	LV1A220209M	
LS-V1A	3/3/2022	Monthly Characterization Sample	LV1A220303M	

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Field Parameter
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	pH (Field) (std. Units)	Specific Conductance (Field) (umho/cm)	Temperature (Field) (^{o}C)
LS-A567	44567.50694	L567220106I	7.81	14359	26.1
LS-A567	2/10/2022	L567220210I	7.95	18759	28.3
LS-A567	3/3/2022	L567220303I	7.8	16123	25.3
LS-A81	1/6/2022	LA81220106I	6.21	2086	12.6
LS-A81	2/10/2022	LA81220210I	7.45	13488	8.1
LS-A81	3/3/2022	LA81220303I	7.26	10712	7.7
LS-CSW	1/6/2022	LCSW220106I	7.41	69.9	5.2
LS-CSW	3/2/2022	LCSW220302D	7.05	383.1	8.5
LS-CSW	3/2/2022	LCSW220302I	7.05	383.1	8.5
LS-LEPS	1/4/2022	LEPS220104M	8.38	3042	5.2
LS-LEPS	1/4/2022	LEPS220104P	8.38	3042	5.2
LS-LEPS	1/12/2022	LEPS220112P	8.13	2732	10.3
LS-LEPS	1/19/2022	LEPS220119P	8.3	3124	10.09
LS-LEPS	1/26/2022	LEPS220126P	8.39	3018	6.9
LS-LEPS	2/3/2022	LEPS220203P	8.16	4036	8.2
LS-LEPS	2/9/2022	LEPS220209M	8.21	4926	16.2
LS-LEPS	2/9/2022	LEPS220209P	8.21	4926	16.2
LS-LEPS	2/16/2022	LEPS220216P	8.31	6135	12.1
LS-LEPS	2/22/2022	LEPS220222P	8.45	6606	9.3
LS-LEPS	3/3/2022	LEPS220303P	8.3	3577	9.6
LS-LEPS	3/7/2022	LEPS220307M	8.29	3495	9.3
LS-LEPS	3/7/2022	LEPS220307P	8.29	3495	9.1
LS-LEPS	3/16/2022	LEPS220316P	8.16	4019	11.3
LS-LEPS	3/22/2022	LEPS220322P	8.17 8.25	4080	12.4 13.2
LS-LEPS	3/29/2022	LEPS220329P		4763	
LS-MH46N	1/5/2022	L46N220105M	7.35	8024	13.1
LS-MH46N	2/9/2022	L46N220209M	7.03	6545	24.3
LS-MH46N	3/3/2022	L46N220303M	7.08	7605	20.7
LS-PS1A	1/6/2022	LP1A220106I	6.89	212.3	8.8
LS-PS1A	2/10/2022	LP1A220210I	7.06	2254	14.5
LS-PS1A	3/2/2022	LP1A220302I	6.08	202	11.3
LS-PS2A	1/5/2022	LP2A220105M	5.87	145	7.3
LS-PS2A	2/9/2022	LP2A220209M	5.8	117	11.5
LS-PS2A	3/3/2022	LP2A220303M	5.69	72	8.2
LS-PS4	1/6/2022	LP4-220106I	6.97	291.1	8.6
LS-PS4	2/10/2022	LP4-220210I	7.46	1132	11.3
LS-PS4	3/2/2022	LP4-220302I	6.52	545	11.2
LS-V1A	1/5/2022	LV1A220105M	7.58	1479	5.5
LS-V1A	2/9/2022	LV1A220209M	8.54	1874	10.4
LS-V1A	3/3/2022	LV1A220303M	7.78	1463	10.1

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Conventional Analyticl Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Alkalinity, Bicarbonate mg/l	Alkalinity, Carbonate mg/l	Alkalinity, Total (As Caco3) mg/l	Ammonia As N mg/l	Biological Oxygen Demand - 5 Day mg/l	Chemical Oxygen Demand mg/l	Chloride mg/l	Coliforms, Fecal cfu/100ml	Coliforms, Total cfu/100ml	Cyanide mg/l	Fixed Suspended Solids mg/l
LS-A567	L5672201061	1/6/2022	6180	1 U	6180	1320	1630	3370 S	1680				9.07
LS-A567	L567220210I	2/10/2022	8160	1 U	8160	2030	1270	4370 S	2200				7.99
LS-A567	L5672203031	3/3/2022	6750	1 U	6750	2320 J	1240	3410 S	1880				2.2 T
LS-A81	LA812201061	1/6/2022	873	1 U	873	125	1620	1950	111				79
LS-A81	LA812202101	2/10/2022	5980	1 U	5980	1310	3390	5540 S	1230				6.57
LS-A81	LA812203031	3/3/2022	4960	1 U	4960	845	273	1190	937				4.6 T
LS-CSW	LCSW220106I	1/6/2022	22 T	1 U	22 T	0.146	4.95	14 T	4.45				72.7
LS-CSW	LCSW220302D	3/2/2022	119	1 U	119	17.3	116	265	27.5				72.4
LS-CSW	LCSW220302I	3/2/2022	117	1 U	117	18.9	122	263	28				67.1
LS-LEPS	LEPS220104M	1/4/2022			1450	246	307	919	306	6600	41000	0.008 U	
LS-LEPS	LEPS220307M	3/7/2022			1480	245	262	883	305	8600 C	32000	0.008 SU	
LS-MH46N	L46N220105M	1/5/2022			2820	624	72.9	1430	1380	1 U	660	0.01 ST	
LS-MH46N	L46N220303M	3/3/2022			2320	680 J	66.4	1170	1140	1 U	14000	0.0085 ST	
LS-PS1A	LP1A220106I	1/6/2022	97.1	1 U	97.1	8.75	10.2	41.8	15.9				11.2
LS-PS1A	LP1A220210I	2/10/2022	721	1 U	721	141	81.4	377	245				1.4 T
LS-PS1A	LP1A220302I	3/2/2022	56.6	1 U	56.6	7.24	5.54	25.7	15.7				1.73
LS-PS2A	LP2A220105M	1/5/2022			66.2	3.15	3.83	28.3	5.38	16 C	5 C	0.002 U	
LS-PS2A	LP2A220303M	3/3/2022			21 T	0.117	2 U	18 T	1.06	5	16	0.0021 T	
LS-PS4	LP4-220106I	1/6/2022	118	1 U	118	13.7	66.7	98.4	19.9				40.8
LS-PS4	LP4-220210I	2/10/2022	392	1 U	392	82.7	162	339	66.7				9.71
LS-PS4	LP4-220302I	3/2/2022	203	1 U	203	43.1	73.4	199	34.3				3.56
LS-V1A	LV1A220105M	1/5/2022			1410	278	937	1420	275	39000	59000 C	0.008 U	
LS-V1A	LV1A220303M	3/3/2022			1100	255	517	1080	247	330000	1000000	0.008 U	

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Conventional Analyticl Data
Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Fluoride mg/l	Hardness mg/l	Nitrate + Nitrite As N mg/l	Phosphorus, Soluble Reactive mg/l	Specific Conductance umhos/cm	Sulfate mg/l	Sulfide mg/l	Total Dissolved Solids mg/l	Total Fats, Oils & Grease mg/l	Total Kjeldahl Nitrogen mg/l	Total Organic Carbon mg/l	Total Solids mg/l	Total Suspended Solids mg/l	Total Volatile Solids mg/l	Volatile Suspended Solids mg/l
LS-A567	L567220106I	1/6/2022	5 U	432	0.11 T		16200	41.8	0.25 T	7660		1350 S	1170 S	8040	20.4	3000	11.3
LS-A567	L567220210I	2/10/2022	2 U	461	0.22 T		20000	39.2	0.485	9140		1750 S	1470 S	9600	24.2	3960	16.2
LS-A567	L567220303I	3/3/2022	2.06	437	0.12 T		17300	57.9	0.34 T	7900		1510 JS	1360 S	8180	12.4	2760	10.1
LS-A81	LA81220106I	1/6/2022	5 U	567	0.014 T		2360	74.5	7.56	1720		127	638	1830	116	1030	36.6
LS-A81	LA81220210I	2/10/2022	20 U	1150	0.5 U		14400	133	70.8	7160		1220 S	1960 S	7440	20.7	3400	14.1
LS-A81	LA81220303I	3/3/2022	1 U	1080	0.05 U		11100	45.4	20.6	4640		868	392	5020	22.5	1460	17.9
LS-CSW	LCSW220106I	1/6/2022	0.024 T	40.3	0.221		78.5	4.8	0.01 U	85		0.507	5.56	188	79.6	48	6.91
LS-CSW	LCSW220302D	3/2/2022	0.1 U	86.3	0.01 U		394	5.52	0.05 U	257		19.6	86.7	396	96.1	185	23.7
LS-CSW	LCSW220302I	3/2/2022	0.04 U	86.9	0.01 U		393	5.66	0.05 U	257		20	85.9	340	90.1	139	23
LS-LEPS	LEPS220104M	1/4/2022	0.4 U		0.05 U	0.0461	3780	15	0.0838		3.8 T	291	294		181	730	151
LS-LEPS	LEPS220307M	3/7/2022	0.31 T		0.02 U	0.0074 T	3710	17	0.062 T		2.1 U	281	200		193	870	165
LS-MH46N	L46N220105M	1/5/2022	2.2 T		0.05 U	2.87	9430	0.666	0.501		2.6 T	586	463		0.5 U	1230	0.5 U
LS-MH46N	L46N220303M	3/3/2022	1.8 T		0.05 U	2.72	7950	2.12	0.938		2 U	502 J	392		10.8	1580	8
LS-PS1A	LP1A220106I	1/6/2022	0.026 T	41.7	0.83		237	6.08	0.023 T	111		10	12.1	128	19.2	32 T	8
LS-PS1A	LP1A220210I	2/10/2022	0.224	141	0.67		2420	11.3	0.057	943		152	124	952	12.1	232	10.6
LS-PS1A	LP1A220302I	3/2/2022	0.047 T	37.9	1.37		206	7.21	0.037 T	110		7.58	9.59	136	4.4	39	2.67
LS-PS2A	LP2A220105M	1/5/2022	0.054 T		0.73	0.008	164	6.12	0.01 U		1.8 U	3.83	9.51		3.6	38.7	1.87
LS-PS2A	LP2A220303M	3/3/2022	0.12 T		0.72	0.0148	78	5.46	0.01 U		2.2 U	0.714	10.4		1.56	17 T	0.93 T
LS-PS4	LP4-220106I	1/6/2022	0.047 T	68.5	0.539		357	6.91	0.01 U	156		18	32.2	216	80	62	39.2
LS-PS4	LP4-220210I	2/10/2022	0.34 T	147	0.96		1100	11.4	0.05 U	476		109	127	516	19.1	232	9.43
LS-PS4	LP4-220302I	3/2/2022	0.04 U	81.6	0.979		578	9.07	0.01 U	347		46.2	77.7	355	7.54	253	3.98
LS-V1A	LV1A220105M	1/5/2022	10 U		0.414	0.781	3670	19	0.0544		2.7 T	269	492		48.5	815	22.3
LS-V1A	LV1A220303M	3/3/2022	0.4 U		0.53 T	0.7 T	3080	17.4	0.093 T		2 U	242	367		59.6	560	31.2

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Metal Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Aluminum Dissolved mg/l	Aluminum Total mg/l	Antimony Dissolved mg/l	Antimony Total mg/l	Arsenic Dissolved mg/l	Arsenic Total mg/l	Barium Dissolved mg/l	Barium Total mg/l	Beryllium Dissolved mg/l	Beryllium Total mg/l
LS-A567	1/6/2022	L567220106I	0.264	0.321	0.0134	0.0143	0.268	0.269	0.331	0.337	0.001 U	0.000999 U
LS-A567	2/10/2022	L567220210I	0.314	0.326	0.0136	0.0145	0.329	0.33	0.375	0.4	0.00101 U	0.00101 U
LS-A567	3/3/2022	L567220303I	0.275	0.339	0.0142	0.0145	0.264	0.268	0.332	0.359	0.00101 U	0.00102 U
LS-A81	1/6/2022	LA81220106I	0.061	1.12	0.00297 U	0.00297 U	0.00523	0.00713	0.0421	0.0504	0.00099 U	0.000991 U
LS-A81	2/10/2022	LA81220210I	0.292	0.487	0.0119	0.0129	0.0494	0.0564	0.141	0.158	0.00101 U	0.00101 U
LS-A81	3/3/2022	LA81220303I	0.196	0.44	0.00893	0.00964	0.0328	0.0375	0.126	0.138	0.00102 U	0.00102 U
LS-CSW	1/6/2022	LCSW220106I	0.0498 U	4.17	0.00299 U	0.00298 U	0.000502	0.00171	0.00498 U	0.0323	0.000995 U	0.000995 U
LS-CSW	3/2/2022	LCSW220302D	0.0507 U	3.83	0.00304 U	0.00296 U	0.00313	0.00443	0.0293	0.0562	0.00101 U	0.000985 U
LS-CSW	3/2/2022	LCSW220302I	0.0501 U	3.87	0.00301 U	0.00294 U	0.00307	0.00449	0.0303	0.0565	0.001 U	0.000981 U
LS-LEPS	1/4/2022	LEPS220104M	0.0745		0.00581		0.0486		0.0564		0.001 U	
LS-LEPS	1/4/2022	LEPS220104P		0.954		0.00579		0.0521		0.0677		0.000996 U
LS-LEPS	1/12/2022	LEPS220112P		0.817 D		0.00507		0.041		0.0625		0.000998 U
LS-LEPS	1/19/2022	LEPS220119P		1.2		0.00507		0.0433		0.0705		0.001 U
LS-LEPS	1/26/2022	LEPS220126P		1.07		0.0052		0.0445		0.0681		0.001 U
LS-LEPS	2/3/2022	LEPS220203P		0.668		0.00623		0.0564		0.0674		0.000996 U
LS-LEPS	2/9/2022	LEPS220209P		1.03		0.00766		0.0759		0.0815		0.001 U
LS-LEPS	2/16/2022	LEPS220216P		1.19		0.00967		0.0971		0.108		0.00101 DU
LS-LEPS	2/22/2022	LEPS220222P		1.51		0.0108		0.108		0.109		0.000994 U
LS-LEPS	3/3/2022	LEPS220303P		1.23 D		0.00693		0.0619		0.0733		0.00102 U
LS-LEPS	3/7/2022	LEPS220307M	0.116		0.00527		0.0439		0.0581		0.001 U	
LS-LEPS	3/7/2022	LEPS220307P		1.09 D		0.00517		0.0477		0.0721		0.00099 U
LS-LEPS	3/16/2022	LEPS220316P		0.993		0.00645		0.0549		0.0853		0.001 U
LS-LEPS	3/22/2022	LEPS220322P		0.888 D		0.00703		0.0563		0.0829		0.00101 U
LS-LEPS	3/29/2022	LEPS220329P		0.831		0.00731		0.0642		0.0869		0.001 U
LS-MH46N	1/5/2022	L46N220105M		0.0499 U		0.003 U		0.0986		0.332		0.000999 U
LS-MH46N	3/3/2022	L46N220303M		0.0512 U		0.00307 U		0.0843		0.288		0.00102 U
LS-PS1A	1/6/2022	LP1A220106I	0.0497 U	0.485	0.00298 U	0.00299 U	0.0037	0.00558	0.0107	0.0133	0.000994 U	0.000995 U
LS-PS1A	2/10/2022	LP1A220210I	0.0501 U	0.0679	0.00777	0.00744	0.0391	0.0397	0.072	0.0806	0.001 U	0.000996 U
LS-PS1A	3/2/2022	LP1A220302I	0.0499 U	0.127	0.00299 U	0.00298 U	0.00245	0.00319	0.00802	0.00934	0.000998 U	0.000993 U
LS-PS2A	1/5/2022	LP2A220105M		0.143		0.00298 U		0.00134		0.0114		0.000992 U
LS-PS2A	3/3/2022	LP2A220303M		0.185		0.00298 U		0.00106		0.00528		0.000992 U
LS-PS4	1/6/2022	LP4-220106I	0.0767	1.61	0.00298 U	0.00298 U	0.0121	0.013	0.0134	0.0235	0.000994 U	0.000994 U
LS-PS4	2/10/2022	LP4-220210I	0.0498 U	0.404	0.00395	0.00403	0.0277	0.028	0.0215	0.0273	0.000996 U	0.000989 U
LS-PS4	3/2/2022	LP4-220302I	0.0496 U	0.284	0.00298 U	0.00294 U	0.00942	0.00983	0.0137	0.0152	0.000992 U	0.00098 U
LS-V1A	1/5/2022	LV1A220105M	0.068	1.65	0.00478	0.0055	0.036	0.04	0.0482	0.0728	0.001 U	0.001 U
LS-V1A	3/3/2022	LV1A220303M		1.27		0.00452		0.0462		0.0623		0.00105 U

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Metal Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Cadmium Dissolved mg/l	Cadmium Total mg/l	Calcium Dissolved mg/l	Calcium Total mg/l	Chromium Dissolved mg/l	Chromium Total mg/l	Cobalt Dissolved mg/l	Cobalt Total mg/l	Copper Dissolved mg/l
LS-A567	1/6/2022	L567220106I	0.000501 U	0.000499 U	57.3	58.9	0.137	0.136	0.048	0.048	0.0163
LS-A567	2/10/2022	L567220210I	0.000505 U	0.000507 U	54.4	54.7	0.151	0.162	0.0553	0.0599	0.00831
LS-A567	3/3/2022	L567220303I	0.000505 U	0.00051 U	55.1	55.5	0.14	0.144	0.0495	0.0505	0.0101
LS-A81	1/6/2022	LA81220106I	0.000495 U	0.000495 U	185	184	0.0187	0.0208	0.00351	0.00465	0.00198 U
LS-A81	2/10/2022	LA81220210I	0.000505 U	0.000503 U	204	218	0.142	0.147	0.0303	0.0357	0.00202 U
LS-A81	3/3/2022	LA81220303I	0.00051 U	0.000509 U	242	236	0.123	0.136	0.0183	0.0226	0.00204 U
LS-CSW	1/6/2022	LCSW220106I	0.000498 U	0.000497 U	7.73	9.22	0.00199 U	0.00631	0.000498 U	0.00279	0.00199 U
LS-CSW	3/2/2022	LCSW220302D	0.000507 U	0.000493 U	22.2	22.1	0.00236	0.00847	0.00182	0.00397	0.00203 U
LS-CSW	3/2/2022	LCSW220302I	0.000501 U	0.000491 U	21.9	22.4	0.0023	0.00834	0.00184	0.00395	0.00201 U
LS-LEPS	1/4/2022	LEPS220104M	0.0005 U		50.3		0.0346		0.00778		0.00237
LS-LEPS	1/4/2022	LEPS220104P		0.000498 U		53.1		0.038		0.0081	
LS-LEPS	1/12/2022	LEPS220112P		0.000499 U		66.1		0.0252		0.00649	
LS-LEPS	1/19/2022	LEPS220119P		0.000501 U		71.8		0.0312		0.00736	
LS-LEPS	1/26/2022	LEPS220126P		0.0005 U		54.3		0.033		0.00748	
LS-LEPS	2/3/2022	LEPS220203P		0.000498 U		45.5		0.0418		0.0096	
LS-LEPS	2/9/2022	LEPS220209P		0.0005 U		46.8		0.0501		0.0123	
LS-LEPS	2/16/2022	LEPS220216P		0.000503 U		47.8		0.0609		0.0154	
LS-LEPS	2/22/2022	LEPS220222P		0.000497 U		52.3		0.0733		0.0161	
LS-LEPS	3/3/2022	LEPS220303P		0.000508 U		44.1		0.0432		0.0102	
LS-LEPS	3/7/2022	LEPS220307M	0.0005 U		70.4		0.0303		0.00696		0.0024
LS-LEPS	3/7/2022	LEPS220307P		0.000495 U		69.2		0.0328		0.00781	
LS-LEPS	3/16/2022	LEPS220316P		0.000501 U		63.9		0.042		0.00948	
LS-LEPS	3/22/2022	LEPS220322P		0.000505 U		63.6		0.0424		0.00947	
LS-LEPS	3/29/2022	LEPS220329P		0.000501 U		63.2		0.0487		0.0109	
LS-MH46N	1/5/2022	L46N220105M		0.000499 U		71.9		0.0854		0.0289	
LS-MH46N	3/3/2022	L46N220303M		0.000512 U		67.3		0.0643		0.0238	
LS-PS1A	1/6/2022	LP1A220106I	0.000497 U	0.000498 U	10.7	10.9	0.00199 U	0.00253	0.000782	0.00115	0.00592
LS-PS1A	2/10/2022	LP1A220210I	0.000501 U	0.000498 U	31.4	33.3	0.0115	0.0122	0.00627	0.00651	0.00229
LS-PS1A	3/2/2022	LP1A220302I	0.000499 U	0.000496 U	10.3	10	0.002 U	0.00199 U	0.000512	0.000606	0.00554
LS-PS2A	1/5/2022	LP2A220105M		0.000496 U		14		0.00226		0.00109	
LS-PS2A	3/3/2022	LP2A220303M		0.000496 U		8.03		0.00241		0.000858	
LS-PS4	1/6/2022	LP4-220106I	0.000497 U	0.000497 U	17.1	17.6	0.00199 U	0.00389	0.000672	0.00141	0.00416
LS-PS4	2/10/2022	LP4-220210I	0.000498 U	0.000494 U	33.8	34.5	0.00479	0.00612	0.00205	0.00214	0.00216
LS-PS4	3/2/2022	LP4-220302I	0.000496 U	0.00049 U	21.3	21	0.00247	0.00309	0.000828	0.00103	0.00496
LS-V1A	1/5/2022	LV1A220105M	0.0005 U	0.0005 U	82.4	86.8	0.0297	0.0362	0.00671	0.00854	0.002 U
LS-V1A	3/3/2022	LV1A220303M		0.000524 U		48.9		0.0299		0.0073	

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Metal Analytical Data
Contact Person: Natalya Usova (206) 263-0608

			Copper	Iron	Iron	Lead	Lead	Magnesium	Magnesium	Manganese	Manganese	Mercury
			Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Site	Date	Sample ID										
LS-A567	1/6/2022	L567220106I	0.0382	2.35	3.65	0.001 U	0.00148	69.5	69.1	0.402	0.419	0.0001 U
LS-A567	2/10/2022	L567220210I	0.0144	2.66	2.83	0.00101 U	0.00126	78.2	78.7	0.328	0.34	0.0001 U
LS-A567	3/3/2022	L567220303I	0.0232	2.23	4.01	0.00101 U	0.00152	71.4	72.5	0.339	0.355	5E-05 U
LS-A81	1/6/2022	LA81220106I	0.00832	11.7	13.8	0.00099 U	0.00189	25.7	26	3.32	3.34	0.0001 U
LS-A81	2/10/2022	LA81220210I	0.00548	0.368	5.86	0.00101 U	0.002	148	148	1.31	1.38	0.0001 U
LS-A81	3/3/2022	LA81220303I	0.00383	0.275	5.89	0.00102 U	0.00132	118	118	1.86	1.87	5E-05 U
LS-CSW	1/6/2022	LCSW220106I	0.012	0.0995 U	5.34	0.000995 U	0.00138	2.37	4.19	0.0676	0.164	0.0001 U
LS-CSW	3/2/2022	LCSW220302D	0.0108	1.14	6.58	0.00101 U	0.00214	6.17	7.56	0.46	0.533	5E-05 U
LS-CSW	3/2/2022	LCSW220302I	0.0106	1.09	6.6	0.001 U	0.00215	6.23	7.53	0.464	0.535	5E-05 U
LS-LEPS	1/4/2022	LEPS220104M		1.87		0.001 U		26.6		0.516		0.0001 U
LS-LEPS	1/4/2022	LEPS220104P	0.00756		3.33		0.000996 U		26.7		0.651	
LS-LEPS	1/12/2022	LEPS220112P	0.00699		2.98		0.000998 U		22		0.874	
LS-LEPS	1/19/2022	LEPS220119P	0.0083		2.95		0.00137		25.8		0.796	
LS-LEPS	1/26/2022	LEPS220126P	0.0072		2.67		0.00134		24.9		0.633	
LS-LEPS	2/3/2022	LEPS220203P	0.00486		2.46		0.000996 U		28.9		0.517	
LS-LEPS	2/9/2022	LEPS220209P	0.00702		3.17		0.00159		34.8		0.535	
LS-LEPS	2/16/2022	LEPS220216P	0.00673		3.66		0.00174		42.1		0.556	
LS-LEPS	2/22/2022	LEPS220222P	0.00821		4.41		0.00192		45.3		0.62	
LS-LEPS	3/3/2022	LEPS220303P	0.00951		3.85		0.00154		28.5		0.605	
LS-LEPS	3/7/2022	LEPS220307M		1.59		0.001 U		28.7		0.853		5E-05 U
LS-LEPS	3/7/2022	LEPS220307P	0.00759		3.28		0.00135		27.6		0.902	
LS-LEPS	3/16/2022	LEPS220316P	0.00806		3.5		0.00139		32		0.721	
LS-LEPS	3/22/2022	LEPS220322P	0.00723		3.73		0.00122		31.7		0.677	
LS-LEPS	3/29/2022	LEPS220329P	0.00673		4.09		0.00108		34.9		0.643	
LS-MH46N	1/5/2022	L46N220105M	0.002 U		2.08		0.000999 U		43.9		0.381	
LS-MH46N	3/3/2022	L46N220303M	0.00205 U		2.29		0.00102 U		39.7		0.462	
LS-PS1A	1/6/2022	LP1A220106I	0.0122	0.275	3.51	0.000994 U	0.000995 U	3.34	3.53	0.135	0.158	0.0001 U
LS-PS1A	2/10/2022	LP1A220210I	0.00549	0.808	1.23	0.001 U	0.000996 U	13.8	14.1	0.363	0.386	0.0001 U
LS-PS1A	3/2/2022	LP1A220302I	0.00856	0.273	1.04	0.000998 U	0.000993 U	3.21	3.13	0.0838	0.09	5E-05 U
LS-PS2A	1/5/2022	LP2A220105M	0.0221		1.48		0.000992 U		4.34		0.195	
LS-PS2A	3/3/2022	LP2A220303M	0.0265		0.735		0.000992 U		3.11		0.114	
LS-PS4	1/6/2022	LP4-220106I	0.0104	0.793	3.01	0.000994 U	0.00106	5.43	5.95	0.22	0.256	0.0001 U
LS-PS4	2/10/2022	LP4-220210I	0.00439	0.989	2.04	0.000996 U	0.000989 U	15.1	14.8	0.669	0.704	0.0001 U
LS-PS4	3/2/2022	LP4-220302I	0.00835	0.804	1.26	0.000992 U	0.00098 U	7.15	7.08	0.274	0.284	5E-05 U
LS-V1A	1/5/2022	LV1A220105M	0.00974	2.03	5.12	0.001 U	0.00124	28.7	30.5	0.922	1.11	0.0001 U
LS-V1A	3/3/2022	LV1A220303M	0.00847		3.47		0.00112		21.8		0.787	

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Metal Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Mercury Total mg/l	Nickel Dissolved mg/l	Nickel Total mg/l	Potassium Dissolved mg/l	Potassium Total mg/l	Selenium Dissolved mg/l	Selenium Total mg/l	Silver Dissolved mg/l	Silver Total mg/l	Sodium Dissolved mg/l
LS-A567	1/6/2022	L567220106I	0.0001 U	0.173	0.178	517	514	0.00501 U	0.00499 U	0.000401 U	0.000399 U	1700
LS-A567	2/10/2022	L567220210I	0.0001 U	0.188	0.214	642	641	0.00505 U	0.00507 U	0.000404 U	0.000406 U	2150
LS-A567	3/3/2022	L567220303I	5E-05 U	0.187	0.189	543	544	0.00505 U	0.0051 U	0.000404 U	0.000408 U	1730
LS-A81	1/6/2022	LA81220106I	0.0001 U	0.0235	0.0267	67.4	66.8	0.00495 U	0.00495 U	0.000396 U	0.000396 U	128
LS-A81	2/10/2022	LA81220210I	0.0001 U	0.146	0.166	521	529	0.00505 U	0.00503 U	0.000404 U	0.000402 U	1170
LS-A81	3/3/2022	LA81220303I	5E-05 U	0.143	0.154	389	379	0.0051 U	0.00509 U	0.000408 U	0.000407 U	878
LS-CSW	1/6/2022	LCSW220106I	0.0001 U	0.000995 U	0.00861	1.29	1.83	0.00498 U	0.00497 U	0.000398 U	0.000398 U	3.68
LS-CSW	3/2/2022	LCSW220302D	5E-05 U	0.00443	0.0114	9.39	9.33	0.00507 U	0.00493 U	0.000405 U	0.000394 U	26.9
LS-CSW	3/2/2022	LCSW220302I	5E-05 U	0.00421	0.011	9.44	9.42	0.00501 U	0.00491 U	0.000401 U	0.000393 U	27.3
LS-LEPS	1/4/2022	LEPS220104M		0.0364		113		0.005 U		0.0004 U		311
LS-LEPS	1/4/2022	LEPS220104P	0.0001 U		0.0371		114		0.00498 U		0.000398 U	
LS-LEPS	1/12/2022	LEPS220112P	0.0001 U		0.0296		82		0.00499 U		0.000399 U	
LS-LEPS	1/19/2022	LEPS220119P	0.0001 U		0.0342		94.6		0.00501 U		0.000401 U	
LS-LEPS	1/26/2022	LEPS220126P	0.0001 U		0.0329		95		0.005 U		0.0004 U	
LS-LEPS	2/3/2022	LEPS220203P	0.0001 U		0.0406		125		0.00498 U		0.000398 U	
LS-LEPS	2/9/2022	LEPS220209P	0.0001 U		0.0525		150		0.005 U		0.0004 U	
LS-LEPS	2/16/2022	LEPS220216P	0.0001 U		0.0618		194		0.00503 U		0.000403 U	
LS-LEPS	2/22/2022	LEPS220222P	0.0001 U		0.0695		222		0.00497 U		0.000398 U	
LS-LEPS	3/3/2022	LEPS220303P	0.0001 U		0.0436		129		0.00508 U		0.000406 U	
LS-LEPS	3/7/2022	LEPS220307M		0.0355		110		0.005 U		0.0004 U		305
LS-LEPS	3/7/2022	LEPS220307P	5E-05 U		0.0362		108		0.00495 U		0.000396 U	
LS-LEPS	3/16/2022	LEPS220316P	0.0001 U		0.0446		128		0.00501 U		0.000401 U	
LS-LEPS	3/22/2022	LEPS220322P	0.0001 U		0.0436		131		0.00505 U		0.000404 U	
LS-LEPS	3/29/2022	LEPS220329P	0.0001 U		0.0481		151		0.00501 U		0.000401 U	
LS-MH46N	1/5/2022	L46N220105M	0.0001 U		0.119		309		0.00499 U		0.000399 U	
LS-MH46N	3/3/2022	L46N220303M	5E-05 U		0.102		257		0.00512 U		0.00041 U	
LS-PS1A	1/6/2022	LP1A220106I	0.0001 U	0.00387	0.0051	5.22	5.23	0.00497 U	0.00498 U	0.000398 U	0.000398 U	16.1
LS-PS1A	2/10/2022	LP1A220210I	0.0001 U	0.0246	0.0271	59.7	61.6	0.00501 U	0.00498 U	0.000401 U	0.000398 U	223
LS-PS1A	3/2/2022	LP1A220302I	5E-05 U	0.00339	0.00352	4.58	4.48	0.00499 U	0.00496 U	0.000399 U	0.000397 U	14.2
LS-PS2A	1/5/2022	LP2A220105M	0.0001 U		0.00743		3.56		0.00496 U		0.000397 U	
LS-PS2A	3/3/2022	LP2A220303M	5E-05 U		0.00664		1.21		0.00496 U		0.000397 U	
LS-PS4	1/6/2022	LP4-220106I	0.0001 U	0.0029	0.00512	6.76	6.81	0.00497 U	0.00497 U	0.000398 U	0.000398 U	19.8
LS-PS4	2/10/2022	LP4-220210I	0.0001 U	0.00645	0.00702	26.5	26.1	0.00498 U	0.00494 U	0.000398 U	0.000396 U	75.6
LS-PS4	3/2/2022	LP4-220302I	5E-05 U	0.0045	0.00488	11.7	12.2	0.00496 U	0.0049 U	0.000397 U	0.000392 U	30.9
LS-V1A	1/5/2022	LV1A220105M	0.0001 U	0.0349	0.0414	108	109	0.005 U	0.005 U	0.0004 U	0.0004 U	273
LS-V1A	3/3/2022	LV1A220303M	5E-05 U		0.0314		90		0.00524 U		0.000419 U	

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill --- Leachate Metal Analytical Data
Contact Person: Natalya Usova (206) 263-0608

			Sodium	Thallium	Thallium	Tin	Tin	Vanadium	Vanadium	Zinc	Zinc
			Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Site	Date	Sample ID									
LS-A567	1/6/2022	L567220106I	1660	0.000751 U	0.000749 U	0.0317	0.0327	0.103	0.105	0.0562	0.0836
LS-A567	2/10/2022	L567220210I	2070	0.000758 U	0.00076 U	0.0357	0.0382	0.131	0.13	0.0491	0.0622
LS-A567	3/3/2022	L567220303I	1760	0.000758 U	0.000765 U	0.0285	0.0289	0.108	0.108	0.0398	0.0706
LS-A81	1/6/2022	LA81220106I	125	0.000742 U	0.000743 U	0.00495 U	0.00495 U	0.00607	0.00789	0.00495 U	0.14
LS-A81	2/10/2022	LA81220210I	1150	0.000757 U	0.000754 U	0.00655	0.0101	0.0386	0.0388	0.0545	0.76
LS-A81	3/3/2022	LA81220303I	866	0.000765 U	0.000764 U	0.0051 U	0.00604	0.0372	0.0364	0.0225	0.482
LS-CSW	1/6/2022	LCSW220106I	4.18	0.000747 U	0.000746 U	0.00498 U	0.00497 U	0.00106	0.0098	0.00498 U	0.0195
LS-CSW	3/2/2022	LCSW220302D	26.4	0.00076 U	0.000739 U	0.00507 U	0.00493 U	0.00238	0.0109	0.00646	0.0192
LS-CSW	3/2/2022	LCSW220302I	26.1	0.000752 U	0.000736 U	0.00501 U	0.00491 U	0.00221	0.0111	0.007	0.0182
LS-LEPS	1/4/2022	LEPS220104M		0.00075 U		0.005 U		0.0129		0.0417	
LS-LEPS	1/4/2022	LEPS220104P	301		0.000747 U		0.00498 U		0.015		0.132
LS-LEPS	1/12/2022	LEPS220112P	222		0.000749 U		0.00499 U		0.0108		0.104
LS-LEPS	1/19/2022	LEPS220119P	254		0.000752 U		0.00501 U		0.0145		0.166
LS-LEPS	1/26/2022	LEPS220126P	257		0.00075 U		0.005 U		0.0134		0.108
LS-LEPS	2/3/2022	LEPS220203P	333		0.000747 U		0.00498 U		0.0158		0.0938
LS-LEPS	2/9/2022	LEPS220209P	420		0.00075 U		0.00641		0.0201		0.139
LS-LEPS	2/16/2022	LEPS220216P	519		0.000755 U		0.00668		0.025		0.155
LS-LEPS	2/22/2022	LEPS220222P	582		0.000746 U		0.00719		0.0267		0.157
LS-LEPS	3/3/2022	LEPS220303P	331 D		0.000762 U		0.00508 U		0.0176		0.0898
LS-LEPS	3/7/2022	LEPS220307M		0.000751 U		0.005 U		0.0138		0.0434	
LS-LEPS	3/7/2022	LEPS220307P	288		0.000743 U		0.00495 U		0.016		0.108
LS-LEPS	3/16/2022	LEPS220316P	343		0.000751 U		0.00501 U		0.0174 D		0.122
LS-LEPS	3/22/2022	LEPS220322P	343		0.000758 U		0.00505 U		0.0173		0.0978
LS-LEPS	3/29/2022	LEPS220329P	393		0.000752 U		0.00561		0.0178		0.0968
LS-MH46N	1/5/2022	L46N220105M	1040		0.000749 U		0.00499 U		0.102		0.00499 U
LS-MH46N	3/3/2022	L46N220303M	814		0.000768 U		0.00512 U		0.0752		0.00745
LS-PS1A	1/6/2022	LP1A220106I	15.8	0.000745 U	0.000747 U	0.00497 U	0.00498 U	0.00127	0.00542	0.0121	0.0181
LS-PS1A	2/10/2022	LP1A220210I	211	0.000751 U	0.000747 U	0.00501 U	0.00498 U	0.0152	0.0158	0.00927	0.013
LS-PS1A	3/2/2022	LP1A220302I	14	0.000749 U	0.000745 U	0.00499 U	0.00496 U	0.00134	0.00177	0.0102	0.0134
LS-PS2A	1/5/2022	LP2A220105M	6.25		0.000744 U		0.00496 U		0.00205		0.0177
LS-PS2A	3/3/2022	LP2A220303M	2.08		0.000744 U		0.00496 U		0.00283		0.00992
LS-PS4	1/6/2022	LP4-220106I	19.7	0.000746 U	0.000746 U	0.00497 U	0.00497 U	0.00143	0.00478	0.0167	0.0306
LS-PS4	2/10/2022	LP4-220210I	72.5	0.000747 U	0.000742 U	0.00498 U	0.00494 U	0.00254	0.00363	0.00805	0.0137
LS-PS4	3/2/2022	LP4-220302I	32.1	0.000744 U	0.000735 U	0.00496 U	0.0049 U	0.00158	0.00206	0.0231	0.0226
LS-V1A	1/5/2022	LV1A220105M	276	0.00075 U	0.00075 U	0.005 U	0.00554	0.0103	0.0132	0.0483	0.137
LS-V1A	3/3/2022	LV1A220303M	239		0.000785 U		0.00524 U		0.0137		0.0496

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate VOAs Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	1,1,1,2-Tetrachloroethane 630-20-6 (ug/L)	1,1,1-Trichloroethane 71-55-6 (ug/L)	1,1,2,2-Tetrachloroethane 79-34-5 (ug/L)	1,1,2-Trichloroethane 79-00-5 (ug/L)	1,1-Dichloroethane 75-34-3 (ug/L)	1,1-Dichloroethene 75-35-4 (ug/L)	1,1-Dichloropropene 563-58-6 (ug/L)	1,2,3-Trichloropropane 96-18-4 (ug/L)
LS-LEPS	LEPS220104M	1/4/2022	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-LEPS	LEPS220307M	3/7/2022	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-MH46N	L46N220105M	1/5/2022	6.25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
LS-MH46N	L46N220303M	3/3/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.411	0.1 U	0.1 U	0.1 U
LS-PS2A	LP2A220105M	1/5/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LS-PS2A	LP2A220303M	3/3/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LS-V1A	LV1A220105M	1/5/2022	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-V1A	LV1A220303M	3/3/2022	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate VOAs Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	1,2-Dibromo-3-Chloropropane 96-12-8 (ug/L)	1,2-Dibromoethane 106-93-4 (ug/L)	1,2-Dichlorobenzene 95-50-1 (ug/L)	1,2-Dichloroethane 107-06-2 (ug/L)	1,2-Dichloropropane 78-87-5 (ug/L)	1,3-Dichlorobenzene 541-73-1 (ug/L)	1,3-Dichloropropane 142-28-9 (ug/L)	1,4-Dichlorobenzene 106-46-7 (ug/L)	2,2-Dichloropropane 594-20-7 (ug/L)	2-Butanone 78-93-3 (ug/L)
LS-LEPS	LEPS220104M	1/4/2022	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	985
LS-LEPS	LEPS220307M	3/7/2022	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	136
LS-MH46N	L46N220105M	1/5/2022	62.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	8.1	2.5 U	6.25 U
LS-MH46N	L46N220303M	3/3/2022	2.5 U	0.1 U	1.67	0.1 U	0.1 U	0.21	0.1 GU	6.96	0.1 U	0.25 GU
LS-PS2A	LP2A220105M	1/5/2022	2.5 U	0.1 U	1.08	0.1 U	0.1 U	0.19 JT	0.1 U	5.02	0.1 U	39.1
LS-PS2A	LP2A220303M	3/3/2022	2.5 U	0.1 U	0.248	0.1 U	0.1 U	0.1 U	0.1 U	1.32	0.1 U	16.2
LS-V1A	LV1A220105M	1/5/2022	25 U	1 U	1 U	2.37	1 U	1 U	1 U	1 U	1 U	3280 D
LS-V1A	LV1A220303M	3/3/2022	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1360
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate VOAs Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	2-Hexanone 591-78-6 (ug/L)	2-Methyl-1-Propanol 78-83-1 (ug/L)	3-Chloropropene 107-05-1 (ug/L)	4-Methyl-2-Pentanone 108-10-1 (ug/L)	Acetone 67-64-1 (ug/L)	Acetonitrile 75-05-8 (ug/L)	Acrolein 107-02-8 (ug/L)	Acrylonitrile 107-13-1 (ug/L)	Benzene 71-43-2 (ug/L)
LS-LEPS	LEPS220104M	1/4/2022	5 U	50 U	1 U	25 U	1260	50 U	25 U	0.35 U	1 U
LS-LEPS	LEPS220307M	3/7/2022	5 U	50 U	1 U	25 U	439	50 U	25 U	0.35 U	1 U
LS-MH46N	L46N220105M	1/5/2022	12.5 U	125 U	2.5 U	62.5 U	62.5 U	125 U	62.5 U	0.875 U	2.5 U
LS-MH46N	L46N220303M	3/3/2022	0.5 GU	5 U	0.1 U	2.5 U	2.5 GU	5 U	2.5 U	0.035 GU	3.38
LS-PS2A	LP2A220105M	1/5/2022	0.515 JT	10.9	0.1 U	9.91	80.2	5 U	2.5 U	0.035 U	1.35
LS-PS2A	LP2A220303M	3/3/2022	0.5 U	5 U	0.1 U	3.44 JT	43.1 B	5 U	2.5 U	0.035 U	0.359
LS-V1A	LV1A220105M	1/5/2022	8.01 T	50 U	1 U	40.9 T	2540 D	50 U	25 U	0.35 U	1.32 T
LS-V1A	LV1A220303M	3/3/2022	5 U	50 U	1 U	25 U	1510	50 U	25 U	0.35 U	1 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.5 U	5 U	0.1 U	2.5 U	2.5 U	5 U	2.5 U	0.035 U	0.1 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.5 U	5 U	0.1 U	2.5 U	2.5 U	5 U	2.5 U	0.035 U	0.1 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.5 U	5 U	0.1 U	2.5 U	2.5 U	5 U	2.5 U	0.035 U	0.1 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.5 U	5 U	0.1 U	2.5 U	2.5 U	5 U	2.5 U	0.035 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate VOAs Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Bromochloromethane 74-97-5 (ug/L)	Bromodichloromethane 75-27-4 (ug/L)	Bromoform 75-25-2 (ug/L)	Bromomethane 74-83-9 (ug/L)	Carbon Disulfide 75-15-0 (ug/L)	Carbon Tetrachloride 56-23-5 (ug/L)	Chlorobenzene 108-90-7 (ug/L)	Chlorodibromomethane 124-48-1 (ug/L)	Chloroethane 75-00-3 (ug/L)
LS-LEPS	LEPS220104M	1/4/2022	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
LS-LEPS	LEPS220307M	3/7/2022	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
LS-MH46N	L46N220105M	1/5/2022	2.5 U	6.25 U	12.5 U	2.5 U	2.5 U	6.25 U	2.5 U	12.5 U	2.5 U
LS-MH46N	L46N220303M	3/3/2022	0.1 U	0.25 U	0.5 U	0.1 U	0.134 JT	0.25 U	1.77	0.5 U	0.1 U
LS-PS2A	LP2A220105M	1/5/2022	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	1.96	0.5 U	0.1 U
LS-PS2A	LP2A220303M	3/3/2022	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.53	0.5 U	0.1 U
LS-V1A	LV1A220105M	1/5/2022	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
LS-V1A	LV1A220303M	3/3/2022	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate VOAs Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Chloroform 67-66-3 (ug/L)	Chloromethane 74-87-3 (ug/L)	Chloroprene 126-99-8 (ug/L)	Cis-1,2-Dichloroethene 156-59-2 (ug/L)	Cis-1,3-Dichloropropene 10061-01-5 (ug/L)	Dibromomethane 74-95-3 (ug/L)	Dichlorodifluoromethane 75-71-8 (ug/L)	Ethylbenzene 100-41-4 (ug/L)	M & P Xylene MPX (ug/L)
LS-LEPS	LEPS220104M	1/4/2022	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1.14 JT
LS-LEPS	LEPS220307M	3/7/2022	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U
LS-MH46N	L46N220105M	1/5/2022	2.5 U	6.25 U	2.5 U	2.5 U	6.25 U	2.5 U	2.5 U	29.9	33.3
LS-MH46N	L46N220303M	3/3/2022	0.1 U	0.25 U	0.1 U	1.56	0.25 U	0.1 U	0.1 U	29.5	31.6
LS-PS2A	LP2A220105M	1/5/2022	0.1 U	0.25 U	0.1 U	0.413	0.25 U	0.1 U	0.1 U	14.1	27
LS-PS2A	LP2A220303M	3/3/2022	0.1 U	0.25 U	0.1 U	0.103 JT	0.25 U	0.1 U	0.1 U	3.26	4.97
LS-V1A	LV1A220105M	1/5/2022	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	4.53	10.3
LS-V1A	LV1A220303M	3/3/2022	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1.15 JT	2.55
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate VOAs Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Methyl Iodide 74-88-4 (ug/L)	Methyl Methacrylate 80-62-6 (ug/L)	Methylacrylonitrile 126-98-7 (ug/L)	Methylene Chloride 75-09-2 (ug/L)	O-Xylene 95-47-6 (ug/L)	Propionitrile 107-12-0 (ug/L)	Styrene 100-42-5 (ug/L)	Tetrachloroethene 127-18-4 (ug/L)
LS-LEPS	LEPS220104M	1/4/2022	1 U	2.5 U	1 U	25 U	1 U	5 U	1 U	1 U
LS-LEPS	LEPS220307M	3/7/2022	1 U	2.5 U	1 U	25 U	1 U	5 U	1 U	1 U
LS-MH46N	L46N220105M	1/5/2022	2.5 U	6.25 U	2.5 U	62.5 U	2.5 U	12.5 U	2.5 U	2.5 U
LS-MH46N	L46N220303M	3/3/2022	0.1 U	0.25 U	0.1 GU	2.5 U	1.56	0.5 U	0.892	0.1 U
LS-PS2A	LP2A220105M	1/5/2022	0.1 U	0.25 U	0.1 U	2.5 U	10.5	0.5 U	0.749	0.163 JT
LS-PS2A	LP2A220303M	3/3/2022	0.1 U	0.25 U	0.1 U	2.5 U	2.41	0.5 U	0.135 JT	0.1 U
LS-V1A	LV1A220105M	1/5/2022	1 U	2.5 U	1 U	25 U	4.52	5 U	1 U	1 U
LS-V1A	LV1A220303M	3/3/2022	1 U	2.5 U	1 U	25 U	1.26 JT	5 U	1 U	1 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.1 U	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.1 U	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.1 U	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.1 U	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate VOAs Analytical Data
Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Toluene 108-88-3 (ug/L)	Trans-1,2-Dichloroethene 156-60-5 (ug/L)	Trans-1,3-Dichloropropene 10061-02-6 (ug/L)	Trans-1,4-Dichloro-2-Butene 110-57-6 (ug/L)	Trichloroethene 79-01-6 (ug/L)	Trichlorofluoromethane 75-69-4 (ug/L)	Vinyl Acetate 108-05-4 (ug/L)	Vinyl Chloride 75-01-4 (ug/L)
LS-LEPS	LEPS220104M	1/4/2022	6.6	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
LS-LEPS	LEPS220307M	3/7/2022	1.49 JT	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
LS-MH46N	L46N220105M	1/5/2022	5.41	2.5 U	12.5 U	12.5 U	2.5 U	2.5 U	2.5 U	0.25 U
LS-MH46N	L46N220303M	3/3/2022	2.18 G	0.1 U	0.5 U	0.5 GU	0.1 U	0.1 U	0.1 U	4.12
LS-PS2A	LP2A220105M	1/5/2022	7.6	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.0976
LS-PS2A	LP2A220303M	3/3/2022	1.51	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.0346
LS-V1A	LV1A220105M	1/5/2022	55.5	1 U	5 U	5 U	1 U	1 U	1 U	0.417
LS-V1A	LV1A220303M	3/3/2022	8.22	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
VOA TRIP BLANK	VTRP220104Y2	1/4/2022	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220105Y	1/3/2022	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220303X	3/2/2022	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP220307Y2	3/2/2022	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate PCB Analytical Data
Contact Person: Natalya Usova (206) 263-0608

		Chemical_Name	2,4,5-T	2,4,5-Tp Silvex	2,4-D	4,4'ddd	4,4'dde	4,4'ddt	Aldrin	Alpha Bhc	Alpha Chlordane	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242
		CAS_RN	93-76-5	93-72-1	94-75-7	72-54-8	72-55-9	50-29-3	309-00-2	319-84-6	5103-71-9	12674-11-2	11104-28-2	11141-16-5	53469-21-9
Site	Date	Sample ID	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
LS-LEPS	LEPS220104M	1/4/2022	0.5 U	0.5 U	1 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.025 U	0.0403
LS-LEPS	LEPS220307M	3/7/2022	0.5 U	0.5 U	1 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.025 U	0.0385
LS-MH46N	L46N220105M	1/5/2022	0.5 U	0.737	1.27	0.025 U	0.025 GU	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.025 U	0.13
LS-MH46N	L46N220303M	3/3/2022	0.5 U	0.611	1.3 J	0.025 U	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 GU	0.025 U	0.025 U	0.025 U	0.13
LS-PS2A	LP2A220105M	1/5/2022	0.5 U	0.5 U	1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U
LS-PS2A	LP2A220303M	3/3/2022	0.5 U	0.5 U	1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U
LS-V1A	LV1A220105M	1/5/2022	0.5 U	0.5 U	1 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.025 U	0.0449
LS-V1A	LV1A220303M	3/3/2022	0.5 U	0.5 U	1 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 GU	0.025 U	0.025 U	0.025 U	0.0354

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate PCB Analytical Data
Contact Person: Natalya Usova (206) 263-0608

		Chemical_Name	Aroclor 1248	Aroclor 1254	Aroclor 1260	Beta Bhc	Delta Bhc	Dieldrin	Dinoseb	Endosulfan I	Endosulfan Ii	Endosulfan Sulfate	Endrin
		CAS_RN	12672-29-6	11097-69-1	11096-82-5	319-85-7	319-86-8	60-57-1	88-85-7	959-98-8	33213-65-9	1031-07-8	72-20-8
Site	Date	Sample ID	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
LS-LEPS	LEPS220104M	1/4/2022	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.5 U	0.025 U	0.025 U	0.025 U	0.025 U
LS-LEPS	LEPS220307M	3/7/2022	0.025 U	0.025 U	0.025 U	0.05 U	0.025 U	0.025 GU	0.5 U	0.075 U	0.025 U	0.025 U	0.025 GU
LS-MH46N	L46N220105M	1/5/2022	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.5 U	0.025 U	0.025 U	0.025 U	0.025 U
LS-MH46N	L46N220303M	3/3/2022	0.025 U	0.025 U	0.025 U	0.075 GU	0.025 GU	0.025 GU	0.5 U	0.025 U	0.025 U	0.025 U	0.025 GU
LS-PS2A	LP2A220105M	1/5/2022	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	0.01 U
LS-PS2A	LP2A220303M	3/3/2022	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	0.01 U
LS-V1A	LV1A220105M	1/5/2022	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 U	0.025 U	0.5 U	0.025 U	0.025 U	0.025 U	0.025 U
LS-V1A	LV1A220303M	3/3/2022	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 GU	0.025 GU	0.5 U	0.025 U	0.025 U	0.025 U	0.025 GU

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

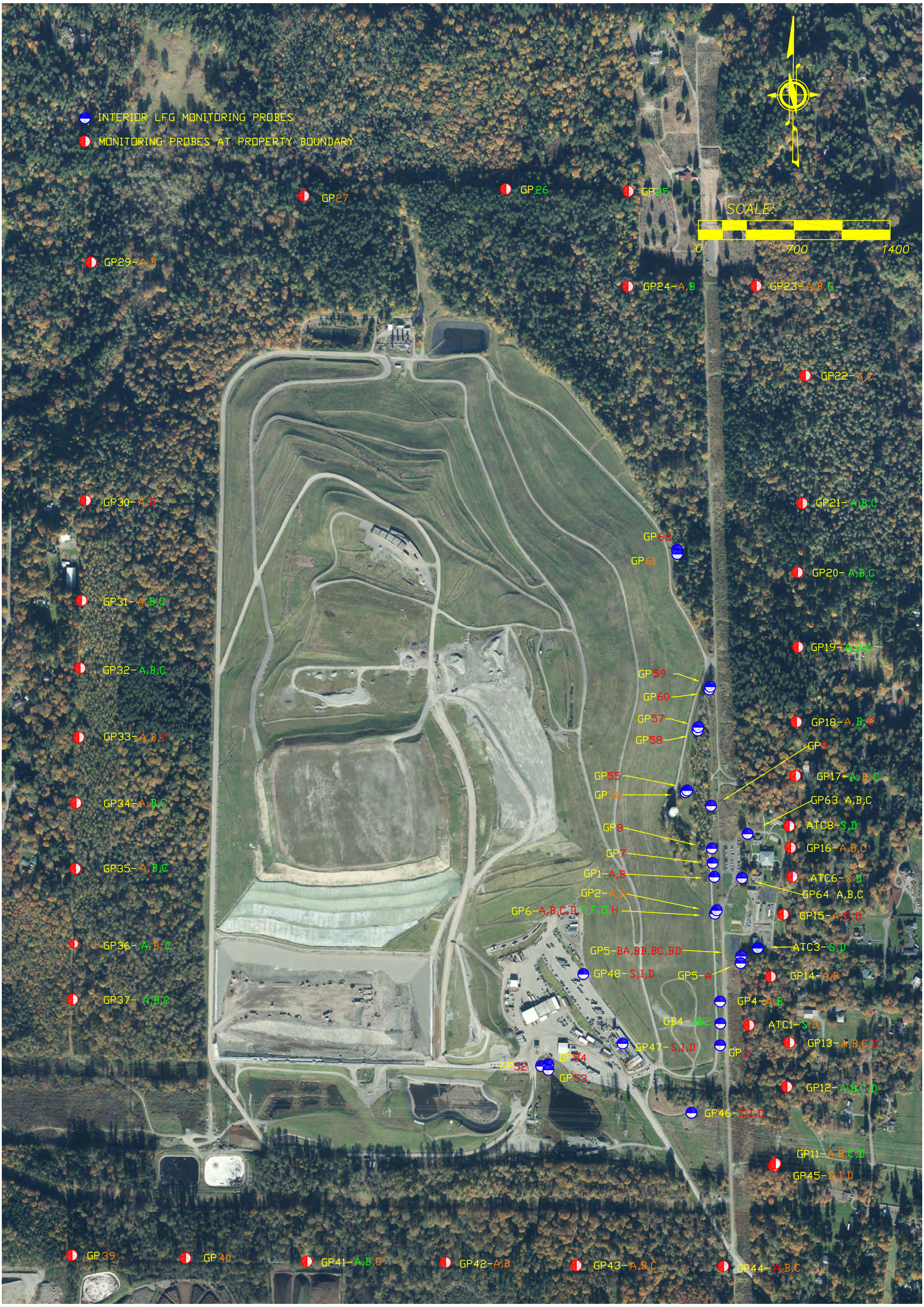
Data Collected from Jan 01, 2022 to March 31, 2022
Cedar Hills Landfill ---Leachate PCB Analytical Data
Contact Person: Natalya Usova (206) 263-0608

		Chemical_Name	Endrin Aldehyde	Heptachlor	Heptachlor Epoxide	Isodrin	Lindane(Gamma Bhc)	Methoxychlor	Total Aroclors	Toxaphene	Trans-Chlordane
		CAS_RN	7421-93-4	76-44-8	1024-57-3	465-73-6	58-89-9	72-43-5	T_AROCLOR	8001-35-2	5103-74-2
Site	Date	Sample ID	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
LS-LEPS	LEPS220104M	1/4/2022	0.025 GU	0.025 U	0.025 U	0.025 U	0.025 U	0.125 U	0.0403	2.5 U	0.025 GU
LS-LEPS	LEPS220307M	3/7/2022	0.025 U	0.025 U	0.05 U	0.025 GU	0.025 U	0.125 U	0.0385	2.5 U	0.025 GU
LS-MH46N	L46N220105M	1/5/2022	0.025 GU	0.025 U	0.025 U	0.025 U	0.025 U	0.125 U	0.13	2.5 U	0.025 GU
LS-MH46N	L46N220303M	3/3/2022	0.025 GU	0.05 GU	0.025 GU	0.025 U	0.025 GU	0.125 U	0.13	2.5 U	0.025 GU
LS-PS2A	LP2A220105M	1/5/2022	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.025 U	1 U	0.01 U
LS-PS2A	LP2A220303M	3/3/2022	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.025 U	1 U	0.01 U
LS-V1A	LV1A220105M	1/5/2022	0.025 GU	0.025 U	0.025 U	0.025 U	0.025 U	0.125 U	0.0449	2.5 U	0.075 GU
LS-V1A	LV1A220303M	3/3/2022	0.025 GU	0.025 GU	0.025 GU	0.025 U	0.025 GU	0.125 U	0.0354	2.5 U	0.025 GU

See Data Qualifier List for Qualifier Information.

Landfill Gas Monitoring Data

Compliance Probes


INTERIOR LFG MONITORING PROBES
MONITORING PROBES AT PROPERTY BOUNDARY
SCALE:
0
700
1400
GP27
GP26
GP25
GP29-A,B
GP24-A,B
GP23-A,B,C
GP22-A,C
GP30-A,B
GP31-A,B,C
GP32-A,B,C
GP33-A,B,C
GP34-A,B,C
GP35-A,B,C
GP36-A,B,C
GP37-A,B,C
GP62
GP61
GP59
GP60
GP57
GP58
GP55
GP56
GP8
GP7
GP1-A,B
GP2-A,B
GP6-A,B,C,D,E,F,G,H
GP5-BA,BB,BC,BD
GP5-A
GP48-S,I,D
GP47-S,I,D
GP54
GP52
GP53
GP21-A,B,C
GP20-A,B,C
GP19-A,B,C
GP18-A,B,C
GP9
GP17-A,B,C
GP63 A,B,C
ATC8-S,D
GP16-A,B,C
ATC6-S,D
GP64 A,B,C
GP15-A,C,D
ATC3-S,D
GP14-A,B
GP4-A,B
GB4-1&2
ATC1-S,D
GP3
GP13-A,B,C,D
GP12-A,B,C,D
GP46-S,I,D
GP11-A,B,C,D
GP45-S,I,D
GP39
GP40
GP41-A,B,C
GP42-A,B
GP43-A,B,C
GP44-A,B,C

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
Jan 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-1D	1/13/2022 15:42	0.0	0.1	20.5	0.0	0.02	
ATC-1S	--	--	--	--	--	--	
ATC-6D	1/13/2022 16:41	0.0	0.8	3.2	0.0	0.52	
ATC-6S	1/13/2022 16:40	0.0	0.3	19.7	0.0	-3.96	
ATC-8D	--	--	--	--	--	--	
ATC-8S	--	--	--	--	--	--	
GP-11A	1/13/2022 15:31	0.0	0.1	20.7	0	0.07	
GP-11B	1/13/2022 15:32	0.0	0.1	20.8	0	-0.7	
GP-11C	1/13/2022 15:33	0.0	0.1	20.8	0	-0.74	
GP-11D	1/13/2022 15:34	0.0	0.1	20.7	0	-0.08	
GP-12A	1/13/2022 15:53	0.0	0.1	21.0	0	-0.56	
GP-12B	1/13/2022 15:54	0.0	0.1	21.0	0	0.01	
GP-12C	1/13/2022 15:55	0.0	0.1	17.0	0	-18.05	
GP-12D	1/13/2022 15:56	0.0	0.6	6.2	0	-2.53	
GP-13A	1/13/2022 15:46	0.0	0.1	20.8	0	0.38	
GP-13B	1/13/2022 15:47	0.0	0.1	20.7	0	-2.65	
GP-13C	1/13/2022 15:48	0.0	0.1	20.9	0	0.02	
GP-13D	1/13/2022 15:49	0.0	0.1	20.9	0	-1.78	
GP-14A	1/13/2022 16:02	0.0	0.1	20.4	0	-0.58	
GP-14B	1/13/2022 16:03	0.0	0.1	21.0	0	-0.63	
GP-15A	1/13/2022 16:51	0.0	0.2	20.5	0	-1.72	
GP-15C	1/13/2022 16:53	0.0	0.7	17.3	0	-0.01	
GP-15D	1/13/2022 16:54	0.0	0.1	20.5	0	-1.25	
GP-16A	1/13/2022 16:35	0.0	0.1	20.6	0	0.04	
GP-16B	1/13/2022 16:36	0.0	0.1	20.5	0	-0.82	
GP-16C	1/13/2022 16:37	0.0	0.1	20.6	0	-2.17	
GP-17A	1/13/2022 17:11	0.0	0.1	19.2	0	0.01	
GP-17B	1/13/2022 17:13	0.0	0.8	16.4	0	0	
GP-17C	1/13/2022 17:14	0.0	0.1	20.5	0	-2.22	
GP-18A	1/13/2022 17:17	0.0	0.1	20.7	0	0.05	
GP-18B	1/13/2022 17:18	0.0	0.3	14.7	0	0.13	
GP-18C	1/13/2022 17:19	0.0	0.1	19.9	0	-2.34	
GP-19A	1/13/2022 17:21	0.0	0.1	20.5	0	0.41	
GP-19B	1/13/2022 17:22	0.0	0.7	15.8	0	0.67	
GP-19C	1/13/2022 17:23	0.0	0.1	20.6	0	-0.11	
GP-20A	1/13/2022 17:26	0.0	0.1	20.7	0	-0.54	
GP-20B	1/13/2022 17:26	0.0	0.1	20.5	0	-0.01	
GP-20C	1/13/2022 17:27	0.0	0.2	20.0	0	0.38	
GP-21A	1/13/2022 17:29	0.0	0.2	18.2	0	0.02	
GP-21B	1/13/2022 17:30	0.0	0.1	10.2	0	0.04	
GP-21C	1/13/2022 17:31	0.0	1.1	15.7	0	-0.01	
GP-22A	1/13/2022 17:34	0.0	0.5	20.4	0	-2.79	
GP-22C	1/13/2022 17:35	0.0	1.2	4.8	0	-1.9	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
Jan 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-23A	1/13/2022 17:38	0.0	0.1	20.6	0	-0.02	
GP-23B	1/13/2022 17:39	0.0	0.1	20.8	0	-0.06	
GP-23C	1/13/2022 17:40	0.0	0.1	20.9	0	-0.12	
GP-24A	1/13/2022 17:43	0.0	0.1	20.9	0	-0.04	
GP-24B	1/13/2022 17:44	0.0	4.0	6.7	0	1.6	
GP-25	1/13/2022 17:47	0.0	0.5	19.0	0	1.78	
GP-26	1/13/2022 17:50	0.0	0.9	16.4	0	-0.06	
GP-27	1/13/2022 17:52	0.0	6.8	9.5	0	-0.03	
GP-29A	1/13/2022 17:56	0.0	4.2	12.0	0	0.03	
GP-29B	1/13/2022 17:57	0.0	0.2	20.6	0	-0.21	
GP-30A	1/13/2022 10:33	0.0	0.1	20.7	0	0.15	
GP-30B	1/13/2022 10:36	0.0	0.2	20.8	0	-1.2	
GP-31A	1/13/2022 10:40	0.0	0.8	19.6	0	0.24	
GP-31B	1/13/2022 10:42	0.0	0.4	15.3	0	7.53	
GP-31C	1/13/2022 10:43	0.0	0.1	20.6	0	-1.85	
GP-32A	1/13/2022 10:46	0.0	0.8	19.2	0	0.04	
GP-32B	1/13/2022 10:47	0.0	0.3	20.5	0	-0.15	
GP-32C	1/13/2022 10:48	0.0	0.4	20.5	0	0.01	
GP-33A	1/13/2022 10:50	0.0	0.4	20.5	0	0.05	
GP-33B	1/13/2022 10:51	0.0	0.1	20.9	0	-0.03	
GP-33C	1/13/2022 10:52	0.0	0.1	21.0	0	-1.4	
GP-34A	1/13/2022 10:57	0.0	0.1	21.0	0	4.17	
GP-34B	1/13/2022 10:58	0.0	0.2	20.7	0	-0.15	
GP-34C	1/13/2022 10:58	0.0	0.1	21.1	0	-0.46	
GP-35A	1/13/2022 11:03	0.0	1.8	19.7	0	1.15	
GP-35B	1/13/2022 11:04	0.0	0.4	3.1	0	0.99	
GP-35C	1/13/2022 11:05	0.0	0.1	20.5	0	-0.01	
GP-36A	1/13/2022 11:08	0.0	0.4	2.6	0	0.04	
GP-36B	1/13/2022 11:10	0.0	0.2	17.5	0	1.01	
GP-36C	1/13/2022 11:11	0.0	0.4	19.2	0	-0.41	
GP-37A	1/13/2022 11:15	0.0	0.5	12.3	0	0.09	
GP-37B	1/13/2022 11:16	0.0	0.1	17.9	0	-0.02	
GP-37C	1/13/2022 11:17	0.0	0.5	3.8	0	-0.03	
GP-39	1/13/2022 14:42	0.0	0.6	18.8	0	-0.05	
GP-40	1/13/2022 14:45	0.0	0.1	18.9	0	-0.9	
GP-41A	1/13/2022 14:48	0.0	0.1	19.8	0	0.04	
GP-41B	1/13/2022 14:49	0.0	0.1	19.8	0	0.19	
GP-41C	1/13/2022 14:50	0.0	0.2	19.2	0	0.01	
GP-42A	1/13/2022 14:55	0.0	0.2	20.0	0	0.05	
GP-42B	1/13/2022 14:56	0.0	0.3	19.8	0	-0.95	
GP-43A	1/13/2022 14:59	0.0	0.4	18.6	0	-0.1	
GP-43B	1/13/2022 15:00	0.0	0.3	18.6	0	-5.32	
GP-43C	1/13/2022 15:01	0.0	0.2	19.2	0	-11	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
Jan 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-44A	1/13/2022 15:06	0.0	0.7	20.1	0	-1.08	
GP-44B	1/13/2022 15:07	0.0	1.0	9.3	0	19.7	
GP-44C	1/13/2022 15:08	0.0	0.1	20.3	0	0.04	
GP-45D	1/13/2022 15:29	0.0	0.1	20.7	0	-1	
GP-45I	1/13/2022 15:28	0.0	0.1	20.7	0	0	
GP-45S	1/13/2022 15:27	0.0	0.1	20.7	0	0.04	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
February 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-1D	2/8/2022 10:58	0.0	0.1	20.6	0.0	-0.17	
ATC-1S	2/8/2022 10:57	0.0	0.1	20.5	0.0	-13.18	
ATC-6D	2/8/2022 12:09	0.0	0.8	2.2	0.0	-0.02	
ATC-6S	2/8/2022 12:08	0.0	0.1	20.7	0.0	-8.07	
ATC-8D	2/8/2022 12:00	0.0	1.8	17.0	0.0	-0.01	
ATC-8S	2/8/2022 11:59	0.0	0.3	19.6	0.0	0.01	
GP-11A	2/8/2022 10:41	0.0	0.1	20.2	0.0	0.01	
GP-11B	2/8/2022 10:42	0.0	0.1	20.2	0.0	-0.84	
GP-11C	2/8/2022 10:44	0.0	0.1	20.2	0.0	-0.67	
GP-11D	2/8/2022 10:45	0.0	0.1	20.2	0.0	0.02	
GP-12A	2/8/2022 11:04	0.0	0.1	20.7	0.0	0.36	
GP-12B	2/8/2022 11:06	0.0	0.1	20.8	0.0	-0.19	
GP-12C	2/8/2022 11:07	0.0	0.1	18.3	0.0	-17.16	
GP-12D	2/8/2022 11:08	0.0	0.5	6.0	0.0	-3.64	
GP-13A	2/8/2022 11:12	0.0	0.1	20.7	0.0	0.02	
GP-13B	2/8/2022 11:13	0.0	0.1	20.7	0.0	0.03	
GP-13C	2/8/2022 11:14	0.0	0.1	20.9	0.0	-0.04	
GP-13D	2/8/2022 11:16	0.0	0.1	20.9	0.0	-2.69	
GP-14A	2/8/2022 11:20	0.0	0.1	20.9	0.0	-0.9	
GP-14B	2/8/2022 11:21	0.0	0.1	21.0	0.0	-1.07	
GP-15A	2/8/2022 11:44	0.0	0.1	20.8	0.0	-0.05	
GP-15C	2/8/2022 11:46	0.0	0.7	17.3	0.0	0.12	
GP-15D	2/8/2022 11:47	0.0	0.1	20.8	0.0	-0.43	
GP-16A	2/8/2022 12:02	0.0	0.1	20.6	0.0	0	
GP-16B	2/8/2022 12:04	0.0	0.1	20.7	0.0	-1.32	
GP-16C	2/8/2022 12:05	0.0	0.1	20.7	0.0	-2.66	
GP-17A	2/8/2022 13:34	0.0	0.2	19.6	0.0	-16.89	
GP-17B	2/8/2022 13:35	0.0	0.8	16.0	0.0	-0.02	
GP-17C	2/8/2022 13:36	0.0	0.1	20.1	0.0	-2.24	
GP-18A	2/8/2022 13:40	0.0	0.3	19.9	0.0	-6.52	
GP-18B	2/8/2022 13:42	0.0	0.4	13.5	0.0	0.16	
GP-18C	2/8/2022 13:43	0.0	0.1	20.0	0.0	-2.45	
GP-19A	2/8/2022 13:47	0.0	0.1	20.2	0.0	-1.98	
GP-19B	2/8/2022 13:48	0.0	0.7	15.1	0.0	-0.02	
GP-19C	2/8/2022 13:49	0.0	0.1	20.2	0.0	-0.03	
GP-20A	2/8/2022 13:55	0.0	0.1	20.3	0.0	0	
GP-20B	2/8/2022 13:56	0.0	0.3	19.1	0.0	-0.05	
GP-20C	2/8/2022 13:58	0.0	0.2	5.6	0.0	1.19	
GP-21A	2/8/2022 14:04	0.0	0.1	19.8	0.0	0.02	

CEDAR HILLS REGIONAL LANDFILL
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Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-21B	2/8/2022 14:05	0.0	0.1	9.7	0.0	0.06	
GP-21C	2/8/2022 14:06	0.0	1.4	12.4	0.0	-9.59	
GP-22A	2/8/2022 14:18	0.0	0.3	20.1	0.0	-12.11	
GP-22C	2/8/2022 14:19	0.0	1.2	3.8	0.0	-3.99	
GP-23A	2/8/2022 14:28	0.0	0.1	19.9	0.0	-0.01	
GP-23B	2/8/2022 14:30	0.0	0.1	20.1	0.0	-0.58	
GP-23C	2/8/2022 14:31	0.0	0.1	20.1	0.0	-0.26	
GP-24A	2/8/2022 14:46	0.0	4.8	9.1	0.0	0.02	
GP-24B	2/8/2022 14:47	0.0	0.8	17.7	0.0	0.08	
GP-25	2/8/2022 14:52	0.0	2.2	12.8	0.0	-8.69	
GP-26	2/8/2022 14:56	0.0	0.9	15.3	0.0	-0.04	
GP-27	2/8/2022 15:05	0.0	6.6	10.0	0.0	0.07	
GP-29A	2/8/2022 15:13	0.0	3.7	12.5	0.0	0.01	
GP-29B	2/8/2022 15:14	0.0	0.6	19.7	0.0	-2.37	
GP-30A	2/8/2022 7:50	0.0	0.3	20.9	0.0	-0.02	
GP-30B	2/8/2022 7:51	0.0	0.3	20.9	0.0	-1.01	
GP-31A	2/8/2022 7:55	0.0	0.3	20.8	0.0	-9.77	
GP-31B	2/8/2022 7:56	0.0	0.4	15.6	0.0	-0.98	
GP-31C	2/8/2022 7:58	0.0	0.2	20.9	0.0	-4.57	
GP-32A	2/8/2022 8:00	0.0	0.2	21.0	0.0	-0.01	
GP-32B	2/8/2022 8:02	0.0	0.2	21.0	0.0	0.02	
GP-32C	2/8/2022 8:03	0.0	0.3	21.0	0.0	0.03	
GP-33A	2/8/2022 8:07	0.0	0.5	20.6	0.0	-13.8	
GP-33B	2/8/2022 8:10	0.0	0.1	21.0	0.0	0.24	
GP-33C	2/8/2022 8:11	0.0	0.1	21.0	0.0	-1.52	
GP-34A	2/8/2022 8:17	0.0	0.0	0.0	0.0	0	
GP-34B	2/8/2022 8:18	0.0	0.1	21.0	0.0	0.02	
GP-34C	2/8/2022 8:20	0.0	0.1	21.0	0.0	-2.39	
GP-35A	2/8/2022 8:24	0.0	0.6	21.0	0.0	-3.14	
GP-35B	2/8/2022 8:25	0.0	0.2	18.8	0.0	1.37	
GP-35C	2/8/2022 8:27	0.0	0.1	21.0	0.0	-0.02	
GP-36A	2/8/2022 8:34	0.0	0.2	20.5	0.0	-0.15	
GP-36B	2/8/2022 8:35	0.0	0.2	20.4	0.0	-5.82	
GP-36C	2/8/2022 8:36	0.0	0.3	18.0	0.0	-1.9	
GP-37A	2/8/2022 9:56	0.0	0.2	20.0	0.0	-7.44	
GP-37B	2/8/2022 9:57	0.0	0.1	20.5	0.0	0.03	
GP-37C	2/8/2022 9:59	0.0	0.6	4.1	0.0	-2.71	
GP-39	2/8/2022 8:52	0.0	1.2	17.1	0.0	0.01	
GP-40	2/8/2022 8:57	0.0	0.1	18.8	0.0	0.41	

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Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-41A	2/8/2022 9:04	0.0	0.1	20.5	0.0	0.08	
GP-41B	2/8/2022 9:07	0.0	0.1	20.5	0.0	-0.02	
GP-41C	2/8/2022 9:09	0.0	0.1	20.5	0.0	0	
GP-42A	2/8/2022 9:14	0.0	0.1	20.5	0.0	-8.63	
GP-42B	2/8/2022 9:16	0.0	0.5	18.8	0.0	-1.26	
GP-43A	2/8/2022 9:35	0.0	0.3	19.0	0.0	-2.95	
GP-43B	2/8/2022 9:37	0.0	0.3	19.2	0.0	-6.76	
GP-43C	2/8/2022 9:38	0.0	0.1	20.4	0.0	-21.99	
GP-44A	2/8/2022 9:44	0.0	0.3	20.2	0.0	-8.04	
GP-44B	2/8/2022 9:45	0.0	1.1	8.8	0.0	13.7	
GP-44C	2/8/2022 9:47	0.0	0.1	20.3	0.0	0.04	
GP-45D	2/8/2022 10:50	0.0	0.1	20.4	0.0	-0.93	
GP-45I	2/8/2022 10:49	0.0	0.1	20.3	0.0	-0.03	
GP-45S	2/8/2022 10:47	0.0	0.1	20.3	0.0	0.02	

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Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)
ATC-1D	3/15/2022 9:55	0.0	0.2	20.8	0.0	-0.3
ATC-1S	3/15/2022 9:54	0.0	0.7	20.6	0.0	-4.55
ATC-6D	3/15/2022 10:55	0.0	1.0	1.7	0.0	5.62
ATC-6S	3/15/2022 10:53	0.0	0.2	20.6	0.0	0.45
ATC-8D	3/15/2022 11:04	0.0	1.1	15.1	0.0	2.99
ATC-8S	3/15/2022 11:03	0.0	0.6	18.1	0.0	-0.76
GP-11A	3/15/2022 9:41	0.0	0.9	19.7	0	0
GP-11B	3/15/2022 9:42	0.0	0.3	20.8	0	-0.43
GP-11C	3/15/2022 9:44	0.0	0.2	18.2	0	-0.48
GP-11D	3/15/2022 9:45	0.0	0.2	20.7	0	-0.11
GP-12A	3/15/2022 10:09	0.0	0.2	20.8	0	-0.11
GP-12B	3/15/2022 10:10	0.0	0.2	20.8	0	-0.15
GP-12C	3/15/2022 10:12	0.0	0.3	17.5	0	-11.57
GP-12D	3/15/2022 10:13	0.0	0.4	16.7	0	-0.16
GP-13A	3/15/2022 10:01	0.0	0.2	20.8	0	-0.12
GP-13B	3/15/2022 10:02	0.0	0.2	20.6	0	-0.1
GP-13C	3/15/2022 10:03	0.0	0.2	20.8	0	-0.19
GP-13D	3/15/2022 10:05	0.0	0.3	19.1	0	-0.03
GP-14A	3/15/2022 10:19	0.0	0.3	16.7	0	-0.06
GP-14B	3/15/2022 10:21	0.0	0.2	20.7	0	-0.18
GP-15A	3/15/2022 10:40	0.0	0.2	20.7	0	-0.14
GP-15C	3/15/2022 10:42	0.0	1.0	16.6	0	-0.07
GP-15D	3/15/2022 10:43	0.0	0.2	20.6	0	-1.53
GP-16A	3/15/2022 10:58	0.0	0.2	20.4	0	0.17
GP-16B	3/15/2022 10:59	0.0	0.4	18.7	0	-0.78
GP-16C	3/15/2022 11:00	0.0	1.2	13.3	0	0.04
GP-17A	3/15/2022 12:58	0.0	0.2	19.3	0	3.97
GP-17B	3/15/2022 13:00	0.0	0.9	15.8	0	-0.06
GP-17C	3/15/2022 13:01	0.0	0.2	19.4	0	-0.26
GP-18A	3/15/2022 13:04	0.0	0.2	19.6	0	-0.6
GP-18B	3/15/2022 13:05	0.0	0.5	12.8	0	0.05
GP-18C	3/15/2022 13:07	0.0	0.3	15.6	0	-0.21
GP-19A	3/15/2022 13:10	0.0	0.2	19.9	0	0.18
GP-19B	3/15/2022 13:11	0.0	0.8	14.9	0	0.02
GP-19C	3/15/2022 13:13	0.0	0.2	20.0	0	0.29
GP-20A	3/15/2022 13:16	0.0	0.2	20.2	0	0.05
GP-20B	3/15/2022 13:17	0.0	0.4	13.0	0	0.03
GP-20C	3/15/2022 13:18	0.0	0.6	14.7	0	0.25

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Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)
GP-21A	3/15/2022 13:21	0.0	0.2	20.3	0	-0.14
GP-21B	3/15/2022 13:22	0.0	0.2	9.4	0	0.29
GP-21C	3/15/2022 13:24	0.0	1.8	14.3	0	-8.92
GP-22A	3/15/2022 13:30	0.0	0.4	20.5	0	-0.81
GP-22C	3/15/2022 13:32	0.0	1.4	3.4	0	-0.27
GP-23A	3/15/2022 13:36	0.0	0.2	20.5	0	0.02
GP-23B	3/15/2022 13:37	0.0	0.2	20.6	0	0.7
GP-23C	3/15/2022 13:39	0.0	0.2	20.7	0	0.61
GP-24A	3/15/2022 13:42	0.0	2.6	14.7	0	0.08
GP-24B	3/15/2022 13:43	0.0	1.1	17.9	0	0.05
GP-25	3/15/2022 13:47	0.0	2.2	13.8	0	-1.74
GP-26	3/15/2022 13:50	0.0	1.1	15.8	0	0.7
GP-27	3/15/2022 13:56	0.0	5.7	10.7	0	0.14
GP-29A	3/15/2022 14:01	0.0	2.4	16.7	0	0.03
GP-29B	3/15/2022 14:02	0.0	0.9	20.5	0	0.22
GP-30A	3/15/2022 7:46	0.0	0.3	20.4	0	0.3
GP-30B	3/15/2022 7:47	0.0	1.0	19.9	0	-0.82
GP-31A	3/15/2022 7:52	0.0	0.5	20.4	0	-8.34
GP-31B	3/15/2022 7:53	0.0	0.5	16.8	0	0.16
GP-31C	3/15/2022 7:54	0.0	0.2	21.1	0	0.04
GP-32A	3/15/2022 7:58	0.0	0.9	18.9	0	0.02
GP-32B	3/15/2022 7:59	0.0	0.5	21.0	0	0.05
GP-32C	3/15/2022 8:00	0.0	0.4	21.0	0	-0.07
GP-33A	3/15/2022 8:05	0.0	0.6	21.0	0	0.02
GP-33B	3/15/2022 8:07	0.0	0.2	21.0	0	0.07
GP-33C	3/15/2022 8:08	0.0	0.2	21.0	0	-0.97
GP-34A	3/15/2022 8:12	0.0	0.2	20.7	0	26.33
GP-34B	3/15/2022 8:14	0.0	0.5	13.5	0	0
GP-34C	3/15/2022 8:15	0.0	0.2	12.1	0	0.59
GP-35A	3/15/2022 8:20	0.0	0.2	20.2	0	5.6
GP-35B	3/15/2022 8:22	0.0	0.2	20.7	0	-0.09
GP-35C	3/15/2022 8:23	0.0	0.2	18.9	0	-0.22
GP-36A	3/15/2022 8:26	0.0	0.5	11.4	0	-0.48
GP-36B	3/15/2022 8:27	0.0	0.3	15.8	0	0.04
GP-36C	3/15/2022 8:28	0.0	0.5	10.8	0	1.14
GP-37A	3/15/2022 8:34	0.0	0.3	15.1	0	-2.47
GP-37B	3/15/2022 8:36	0.0	0.3	20.6	0	0.3
GP-37C	3/15/2022 8:37	0.0	0.9	1.4	0	0.82

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Location ID	Date/Time	CH4 (% Vol)	CO2 % Vol	O2 % Vol	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)
GP-39	3/15/2022 8:42	0.0	1.5	17.5	0	-0.34
GP-40	3/15/2022 8:45	0.0	0.2	18.2	0	-0.09
GP-41A	3/15/2022 8:48	0.0	0.2	21.0	0	0
GP-41B	3/15/2022 8:50	0.0	0.2	21.0	0	-0.22
GP-41C	3/15/2022 8:51	0.0	0.3	21.0	0	-0.04
GP-42A	3/15/2022 8:55	0.0	0.3	20.9	0	-5.41
GP-42B	3/15/2022 8:56	0.0	1.0	16.2	0	-0.13
GP-43A	3/15/2022 8:59	0.0	0.4	19.3	0	-1.16
GP-43B	3/15/2022 9:01	0.0	0.2	21.0	0	-2.62
GP-43C	3/15/2022 9:02	0.0	0.4	12.1	0	-10.84
GP-44A	3/15/2022 9:06	0.1	0.4	20.5	2	-0.13
GP-44B	3/15/2022 9:07	0.0	1.0	10.5	0	-0.2
GP-44C	3/15/2022 9:08	0.0	0.2	20.9	0	-0.1
GP-45D	3/15/2022 9:39	0.0	0.2	20.9	0	-0.53
GP-45I	3/15/2022 9:38	0.0	0.2	20.7	0	0
GP-45S	3/15/2022 9:36	0.0	0.3	20.8	0	-0.1

Interior Probes

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
January 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-3D	1/13/2022 16:48	0.0	0.1	20.5	0	0.03	
ATC-3S	1/13/2022 16:47	0.0	0.1	20.2	0	-0.04	
GP-1A	1/12/2022 22:13	0.0	0.1	21.0	0	0.05	
GP-1B	1/12/2022 22:15	0.0	0.2	21.0	0	-0.82	
GP-2A	1/12/2022 22:42	0.0	1.6	18.7	0	-0.06	
GP-2B	1/12/2022 22:44	0.0	0.1	20.6	0	0.01	
GP-3	1/12/2022 22:54	0.0	0.1	20.6	0	6.87	
GP-46D	1/12/2022 21:29	0.0	0.1	21.0	0	0.73	
GP-46I	1/12/2022 21:27	0.0	0.1	21.0	0	-0.49	
GP-46S	1/12/2022 21:25	0.0	0.1	19.8	0	0.01	
GP-47D	1/13/2022 17:03	0	0.3	6.8	0	0.84	
GP-47I	1/13/2022 17:02	70.1	23.6	0.1	>>>>	-1.8	
GP-47S	1/13/2022 17:01	0	0.1	20.7	0	-1.52	
GP-48D	1/12/2022 21:21	0.0	0.1	21.0	0	-0.04	
GP-48I	1/12/2022 21:20	0.0	0.3	20.8	0	-0.16	
GP-48S	1/12/2022 21:18	0.0	0.2	20.2	0	-0.05	
GP-4A	1/12/2022 22:47	0.0	0.1	20.6	0	-3.57	
GP-4B	1/12/2022 22:49	0.0	0.4	20.3	0	1.36	
GP-52	1/13/2022 15:20	0.0	0.1	20.5	0	-0.09	
GP-53	1/13/2022 15:21	0.0	1.0	17.6	0	-0.54	
GP-54	1/13/2022 15:22	0.0	0.1	20.5	0	-0.01	
GP-55	1/12/2022 22:04	0.0	0.3	21.0	0	0.08	
GP-56	1/12/2022 22:05	0.0	0.7	21.0	0	0.00	
GP-57	1/12/2022 21:59	29.0	13.9	5.9	>>>>	-3.35	
GP-58	1/12/2022 22:00	0.1	14.6	1.9	2	-13.12	
GP-59	1/12/2022 21:54	0.0	0.2	21.0	0	0.12	
GP-5A	1/13/2022 16:08	0.0	0.2	18.0	0	-2.57	
GP-5BA	1/13/2022 16:10	0.0	0.1	20.6	0	0.05	
GP-5BB	1/13/2022 16:10	0.0	0.1	21.0	0	-2.59	
GP-5BC	1/13/2022 16:11	0.0	0.1	21.0	0	-2.62	
GP-5BD	1/13/2022 16:12	0.0	0.1	21.0	0	-2.35	
GP-60	1/12/2022 21:56	0.0	0.1	21.0	0	-0.03	
GP-61	1/12/2022 21:46	0.0	0.1	21.0	0	0.01	
GP-62	1/12/2022 21:48	0.0	3.8	18.9	0	-0.02	
GP-63A	1/13/2022 16:27	0.0	0.2	20.7	0	0.13	
GP-63B	1/13/2022 16:28	0.0	0.1	20.5	0	0.05	
GP-63C	1/13/2022 16:29	0.0	0.1	20.7	0	-2.1	
GP-64A	1/13/2022 16:21	0.0	0.2	20.5	0	0.39	
GP-64B	1/13/2022 16:22	0.0	0.5	20.5	0	0.14	
GP-64C	1/13/2022 16:23	0.0	0.1	20.7	0	-2.1	

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Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-6A	1/12/2022 22:20	0.0	0.1	20.6	0	-0.23	
GP-6B	1/12/2022 22:22	0.0	0.1	20.6	0	0.00	
GP-6C	1/12/2022 22:24	0.0	0.1	20.5	0	0.00	
GP-6D	1/12/2022 22:26	0.0	0.1	20.5	0	-0.01	
GP-6E	1/12/2022 22:27	0.0	0.1	20.5	0	0.11	
GP-6F	1/12/2022 22:29	0.0	0.1	20.5	0	0.04	
GP-6G	1/12/2022 22:31	0.0	0.1	20.5	0	0.16	
GP-6H	1/12/2022 22:33	0.0	0.1	20.6	0	1.21	
GP-7	1/12/2022 21:33	0.0	0.1	21.0	0	0.04	
GP-8	1/12/2022 21:36	0.0	7.5	9.7	0	0.04	
GP-9	1/12/2022 21:40	0.0	0.1	21.0	0	0.24	
GP-B4-1	1/12/2022 22:50	0.0	4.2	14.3	0	-0.01	
GP-B4-2	1/12/2022 22:52	0.0	0.2	20.6	0	0.40	

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Landfill Gas Interior Probes
February 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-3D	2/8/2022 11:41	0.0	0.1	20.9	0	-0.01	
ATC-3S	2/8/2022 11:40	0.0	0.1	20.9	0	-0.02	
GP-1A	2/9/2022 22:36	0.0	0.1	21.0	0.0	-0.02	
GP-1B	2/9/2022 22:39	0.0	0.1	21.0	0.0	-0.02	
GP-2A	2/9/2022 23:02	0.0	4.9	21.0	0.0	-0.18	
GP-2B	2/9/2022 23:04	0.0	0.1	21.0	0.0	-0.19	
GP-3	2/9/2022 23:36	0.0	6.1	10.5	0.0	-0.22	
GP-46D	2/9/2022 23:45	0.0	0.1	21.0	0.0	-0.29	
GP-46I	2/9/2022 23:42	0.0	0.1	21.0	0.0	-1.45	
GP-46S	2/9/2022 23:41	0.0	0.1	21.0	0.0	-0.25	
GP-47D	2/8/2022 13:23	0.3	0.6	18.8	6	-0.03	
GP-47I	2/8/2022 13:22	70.8	23.7	0.2	>>>>	-1.89	
GP-47S	2/8/2022 13:21	0.0	0.1	20.1	0	-1.87	
GP-48D	2/9/2022 23:57	0.0	0.1	21.0	0.0	-0.71	
GP-48I	2/9/2022 23:54	0.0	0.3	21.0	0.0	-0.36	
GP-48S	2/9/2022 23:52	0.0	0.2	20.5	0.0	-0.29	
GP-4A	2/9/2022 23:22	0.0	0.1	21.0	0.0	-0.50	
GP-4B	2/9/2022 23:25	0.0	0.4	21.0	0.0	-3.63	
GP-52	2/8/2022 10:06	0.0	0.2	13.5	0	-0.02	
GP-53	2/8/2022 10:08	0.0	0.3	20.0	0	-0.67	
GP-54	2/8/2022 10:10	0.0	0.1	20.5	0	0.03	
GP-55	2/9/2022 22:22	0.0	0.3	21.0	0.0	-0.13	
GP-56	2/9/2022 22:19	0.1	0.7	21.0	2.0	-0.09	
GP-57	2/9/2022 22:16	58.3	24.9	0.2	>>>>	-6.84	
GP-58	2/9/2022 22:13	0.0	0.2	21.0	0.0	-43.03	
GP-59	2/9/2022 22:08	0.0	0.1	21.0	0.0	-0.04	
GP-5A	2/8/2022 11:28	0.0	0.3	16.7	0	-3.8	
GP-5BA	2/8/2022 11:30	0.0	0.1	20.8	0	0.01	
GP-5BB	2/8/2022 11:32	0.0	0.1	20.9	0	-3.75	
GP-5BC	2/8/2022 11:33	0.0	0.1	21.0	0	-3.68	
GP-5BD	2/8/2022 11:34	0.0	0.1	21.0	0	-3.09	
GP-60	2/9/2022 22:05	0.0	0.2	21.0	0.0	-0.01	
GP-61	2/9/2022 21:53	0.0	0.1	20.6	0.0	-0.52	
GP-62	2/9/2022 21:51	0.0	2.6	18.9	0.0	0.02	
GP-63A	2/8/2022 11:52	0.0	0.2	20.7	0.0	0.30	
GP-63B	2/8/2022 11:53	0.0	0.1	20.7	0.0	-0.01	
GP-63C	2/8/2022 11:55	0.0	0.1	20.8	0.0	-2.39	
GP-64A	2/8/2022 12:12	0.0	0.4	19.9	0.0	0.07	
GP-64B	2/8/2022 12:13	0.0	0.4	20.5	0.0	-0.03	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
February 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-64C	2/8/2022 12:15	0	0.1	20.8	0	-2.61	
GP-6A	2/9/2022 22:43	0.0	0.1	21.0	0.0	-1.22	
GP-6B	2/9/2022 22:45	0.0	0.1	21.0	0.0	-0.99	
GP-6C	2/9/2022 22:48	0.0	0.1	21.0	0.0	-0.83	
GP-6D	2/9/2022 22:50	0.0	0.1	21.0	0.0	-1.31	
GP-6E	2/9/2022 22:51	0.0	0.1	21.0	0.0	-0.93	
GP-6F	2/9/2022 22:53	0.0	0.1	21.0	0.0	-0.96	
GP-6G	2/9/2022 22:56	0.0	0.1	21.0	0.0	-0.93	
GP-6H	2/9/2022 22:58	0.0	0.1	21.0	0.0	-1.28	
GP-7	2/9/2022 22:32	0.0	0.1	21	0	-0.73	
GP-8	2/9/2022 22:27	0.0	0.3	21	0	-0.78	
GP-9	2/9/2022 22:00	0.0	0.1	20.8	0	-0.75	
GP-B4-1	2/9/2022 23:30	0.0	5.7	11	0	-1.32	
GP-B4-2	2/9/2022 23:32	0.0	0.1	21	0	-0.69	

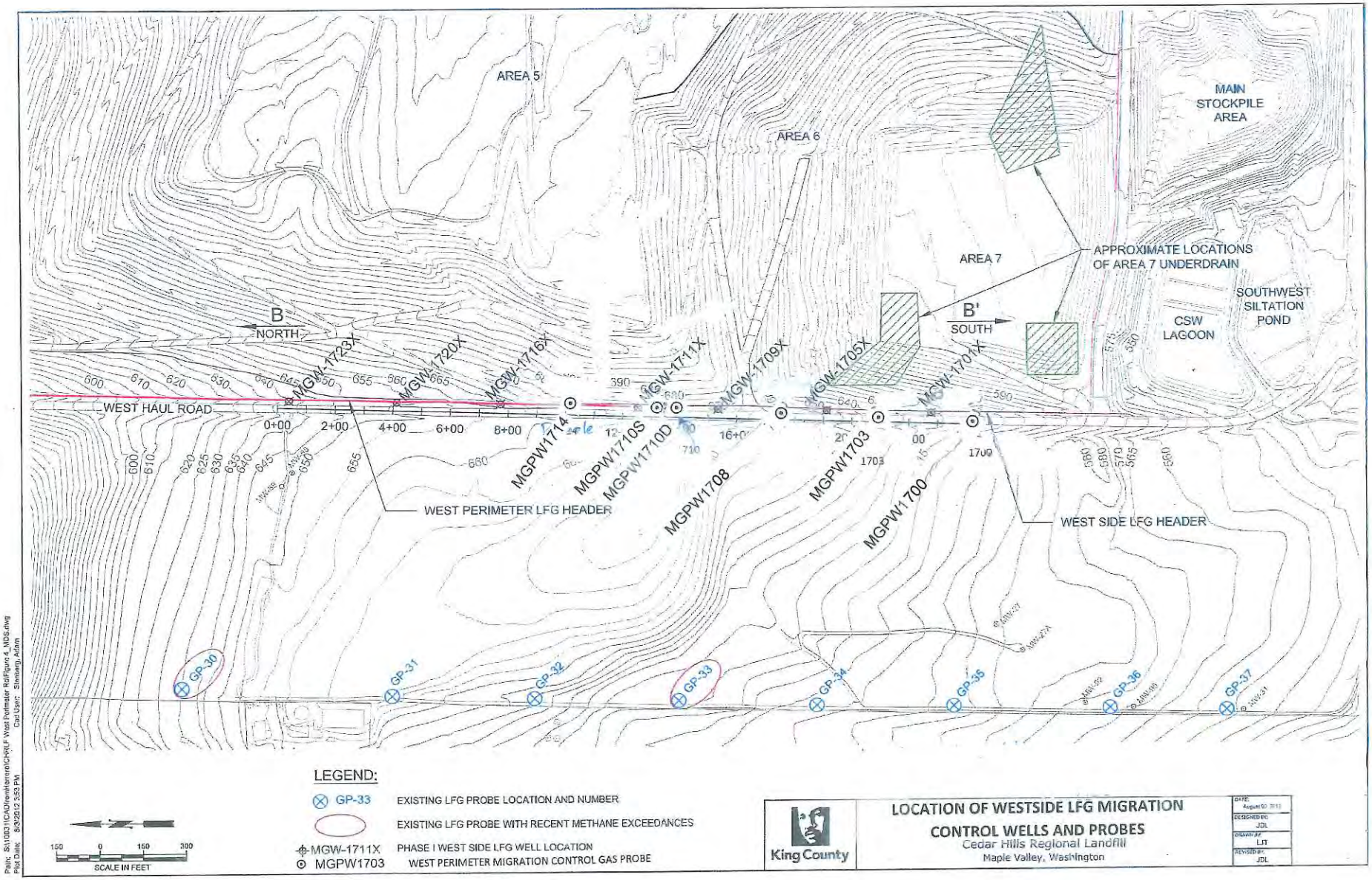
CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
March 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-3D	3/15/2022 10:37	0	0.2	20.7	0	-0.14	
ATC-3S	3/15/2022 10:36	0	0.2	20.7	0	-0.13	
GP-1A	3/10/2022 22:20	0.0	0.1	21.0	0	-0.03	
GP-1B	3/10/2022 22:22	0.0	1.0	19.0	0	-3.27	
GP-2A	3/10/2022 22:43	0.0	4.0	15.6	0	-0.06	
GP-2B	3/10/2022 22:45	0.0	0.1	21.0	0	-0.09	
GP-3	3/10/2022 23:00	0.0	6.2	11.3	0	-0.13	
GP-46D	3/10/2022 23:08	0.0	0.1	21.0	0	-0.74	
GP-46I	3/10/2022 23:06	0.0	0.1	21.0	0	-0.59	
GP-46S	3/10/2022 23:04	0.0	0.2	19.5	0	-0.07	
GP-47D	3/15/2022 9:30	0	1.6	5.5	0	1.49	
GP-47I	3/15/2022 9:28	72.4	23.3	0	>>>>	0.66	
GP-47S	3/15/2022 9:27	76.7	21.4	0	>>>>	0.87	
GP-48D	3/10/2022 23:20	0.0	0.1	21.0	0	-0.86	
GP-48I	3/10/2022 23:18	0.1	0.3	21.0	2	-0.15	
GP-48S	3/10/2022 23:16	0.1	0.4	20.0	2	-0.03	
GP-4A	3/10/2022 22:49	0.0	0.1	21.0	0	0	
GP-4B	3/10/2022 22:51	0.0	0.4	21.0	0	0	
GP-52	3/15/2022 9:19	0	0.2	21	0	0.16	
GP-53	3/15/2022 9:21	0	0.6	19.4	0	-0.23	
GP-54	3/15/2022 9:22	0	0.2	21	0	-0.31	
GP-55	3/10/2022 22:08	0.0	0.3	21.0	0	-0.12	
GP-56	3/10/2022 22:09	0.0	0.3	21.0	0	-0.1	
GP-57	3/10/2022 22:02	57.7	25.2	0.1	>>>>	-3.78	
GP-58	3/10/2022 22:05	0.2	4.8	18.8	4	-17.66	
GP-59	3/10/2022 21:56	0.0	0.1	21.0	0	-0.15	
GP-5A	3/15/2022 10:26	0	0.8	13	0	0.71	
GP-5BA	3/15/2022 10:28	0	0.3	19.8	0	0.17	
GP-5BB	3/15/2022 10:30	0	1.8	9	0	0.83	
GP-5BC	3/15/2022 10:31	0	1.4	7.5	0	0.85	
GP-5BD	3/15/2022 10:32	0	1.2	9.6	0	0.08	
GP-60	3/10/2022 21:59	0.0	0.1	21.0	0	-0.03	
GP-61	3/10/2022 21:43	0.0	0.1	20.9	0	-0.56	
GP-62	3/10/2022 21:45	0.0	2.4	19.2	0	-0.01	
GP-63A	3/15/2022 11:07	0	0.4	20.4	0	-0.15	
GP-63B	3/15/2022 11:08	0	0.2	20.5	0	-0.15	
GP-63C	3/15/2022 11:10	0	0.5	17.8	0	0.07	
GP-64A	3/15/2022 10:47	0	0.5	20.6	0	-0.2	
GP-64B	3/15/2022 10:49	0	0.2	20.7	0	-0.22	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
March 2022 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-64C	3/15/2022 10:50	0.1	1.1	9.6	2	-0.1	
GP-6A	3/10/2022 22:25	0.0	0.1	21.0	0	-1.33	
GP-6B	3/10/2022 22:27	0.0	0.1	21.0	0	-1.06	
GP-6C	3/10/2022 22:29	0.0	0.1	21.0	0	-1.12	
GP-6D	3/10/2022 22:31	0.0	0.1	21.0	0	-1.27	
GP-6E	3/10/2022 22:33	0.0	0.1	21.0	0	-1.07	
GP-6F	3/10/2022 22:35	0.0	0.1	21.0	0	-1.13	
GP-6G	3/10/2022 22:37	0.0	0.1	21.0	0	-1.06	
GP-6H	3/10/2022 22:39	0.0	0.1	21.0	0	-1.3	
GP-7	3/10/2022 22:16	0.0	0.1	21.0	0	-1.09	
GP-8	3/10/2022 22:13	0.0	0.1	21.0	0	-1	
GP-9	3/10/2022 21:50	0.0	0.1	21.0	0	-0.99	
GP-B4-1	3/10/2022 22:54	0.0	6.3	11.3	0	-1.29	
GP-B4-2	3/10/2022 22:56	0.0	0.1	21.0	0	-0.85	

Migration Probes


AREA 5
AREA 6
AREA 7
MAIN STOCKPILE AREA
APPROXIMATE LOCATIONS OF AREA 7 UNDERDRAIN
SOUTHWEST SILTATION POND
CSW LAGOON
B
NORTH
B'
SOUTH
WEST HAUL ROAD
MGW-1723X
MGW-1720X
MGW-1716X
MGW-1711X
MGW-1709X
MGW-1705X
MGW-1701X
MGPW1714
MGPW1710S
MGPW1710D
MGPW1708
MGPW1703
MGPW1700
WEST PERIMETER LFG HEADER
WEST SIDE LFG HEADER
GP-30
GP-31
GP-32
GP-33
GP-34
GP-35
GP-36
GP-37
LEGEND:
GP-33 EXISTING LFG PROBE LOCATION AND NUMBER
EXISTING LFG PROBE WITH RECENT METHANE EXCEEDANCES
MGW-1711X PHASE I WEST SIDE LFG WELL LOCATION
MGPW1703 WEST PERIMETER MIGRATION CONTROL GAS PROBE
150 0 150 300
SCALE IN FEET
King County
LOCATION OF WESTSIDE LFG MIGRATION CONTROL WELLS AND PROBES
Cedar Hills Regional Landfill
Maple Valley, Washington
DATE: August 30, 2013
DESIGNED BY: JDL
DRAWN BY: LJT
REVISED BY: JDL

CEDAR HILLS REGIONAL LANDFILL

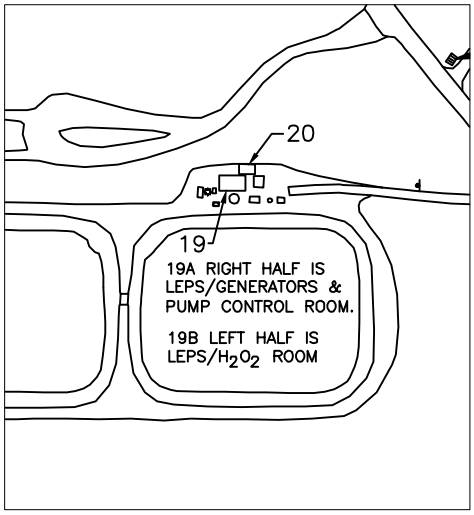
West Perimeter Landfill Gas Migration Control Probes

First Quarter 2022 Monitoring Data

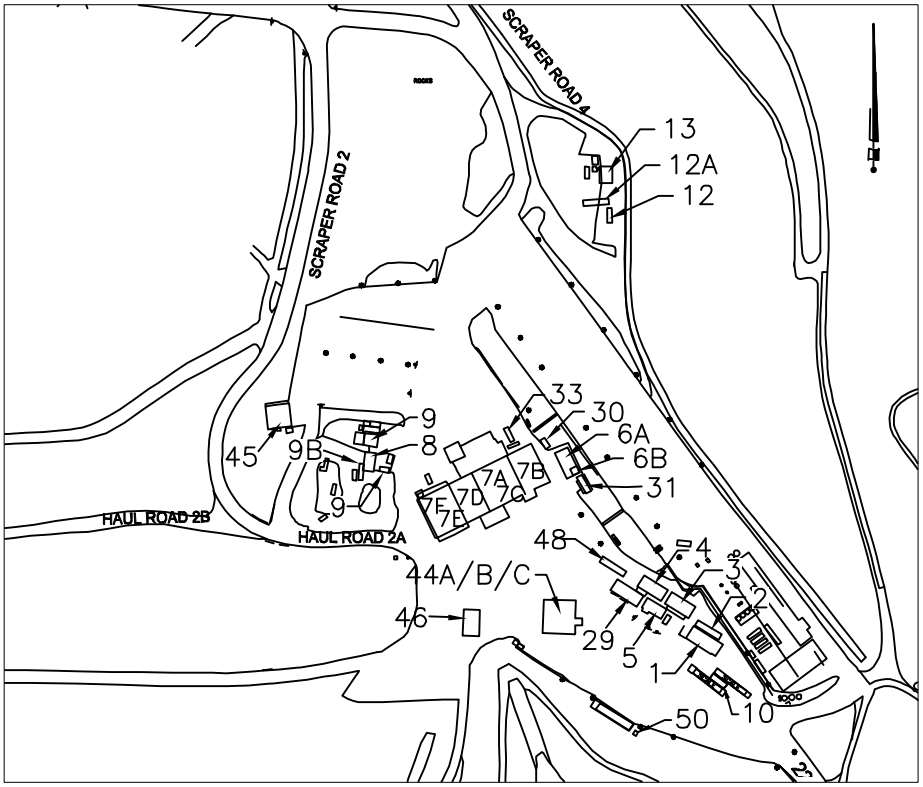
Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC	Comments
MGPW 1700	1/3/2022	2:10pm	29.51	0	0.5	19.5	0.3	
MGPW 1700	1/31/2022	10:21am	30.1	0	0	20.6	0	
MGPW 1700	2/5/2022	10:00am	30.37	0	0.2	21	-0.05	
MGPW 1700	2/19/2022	10:22am	30.04	0.3	0.6	20.6	-0.03	
MGPW 1700	3/15/2022	3:28pm	30.04	0	0.2	20.7	-0.03	
MGPW 1700	3/28/2022	8:47am	29.69	0.1	0.2	21	-0.17	
MGPW 1708	1/3/2022	2:08pm	29.51	1.9	9.2	4.3	-0.7	
MGPW 1708	1/31/2022	10:36am	30.1	0	0	20.3	-1.86	
MGPW 1708	2/5/2022	10:01am	30.37	0	0.2	20.3	-2.48	
MGPW 1708	2/19/2022	10:31am	30.04	7.4	12.9	0	0.62	
MGPW 1708	3/15/2022	3:38pm	30.04	0	0.3	20.5	-1.76	
MGPW 1708	3/28/2022	8:59am	29.69	0.1	0.3	21	-0.94	
MGPW 1710S	1/3/2022	2:04pm	29.51	0	0	20.6	-0.60	
MGPW 1710S	1/31/2022	10:34am	30.1	0	0	20.1	-1.62	
MGPW 1710S	2/5/2022	10:02am	30.37	0	0.2	20.1	-2.37	
MGPW 1710S	2/19/2022	10:36am	30.04	0.2	6.4	12.4	0.60	
MGPW 1710S	3/15/2022	3:52pm	30.04	0	0.2	20.5	-1.82	
MGPW 1710S	3/28/2022	9:07am	29.69	0	0.1	21	-1.03	
MGPW 1710D	1/3/2022	2:06pm	29.51	0	0	20.7	-0.7	
MGPW 1710D	1/31/2022	10:35am	30.1	0	0	20.2	-1.82	
MGPW 1710D	2/5/2022	10:03am	30.37	0	0,2	21	-2.39	
MGPW 1710D	2/19/2022	10:37am	30.04	0.1	0.3	20.8	0.75	
MGPW 1710D	3/15/2022	4:00pm	30.04	0	0.1	20.8	-1.75	
MGPW 1710D	3/28/2022	9:05am	29.69	0	0.2	21	-1.07	
MGPW 1714	1/3/2022	2:01pm	29.51	0	0	20.4	-0.8	
MGPW 1714	1/31/2022	10:32am	30.1	0	0	20.1	-1.71	
MGPW 1714	2/5/2022	10:04am	30.37	0	0.2	20	-2.28	
MGPW 1715	2/19/2022	10:41am	30.04	0.5	8.3	8.3	0.73	
MGPW 1716	3/15/2022	4:12pm	30.04	0	0.2	20.7	-1.77	
MGPW 1714	3/28/2022	9:14am	29.69	0.1	0.4	21	-1.06	

On-Site Building Monitoring

Aeration Ponds



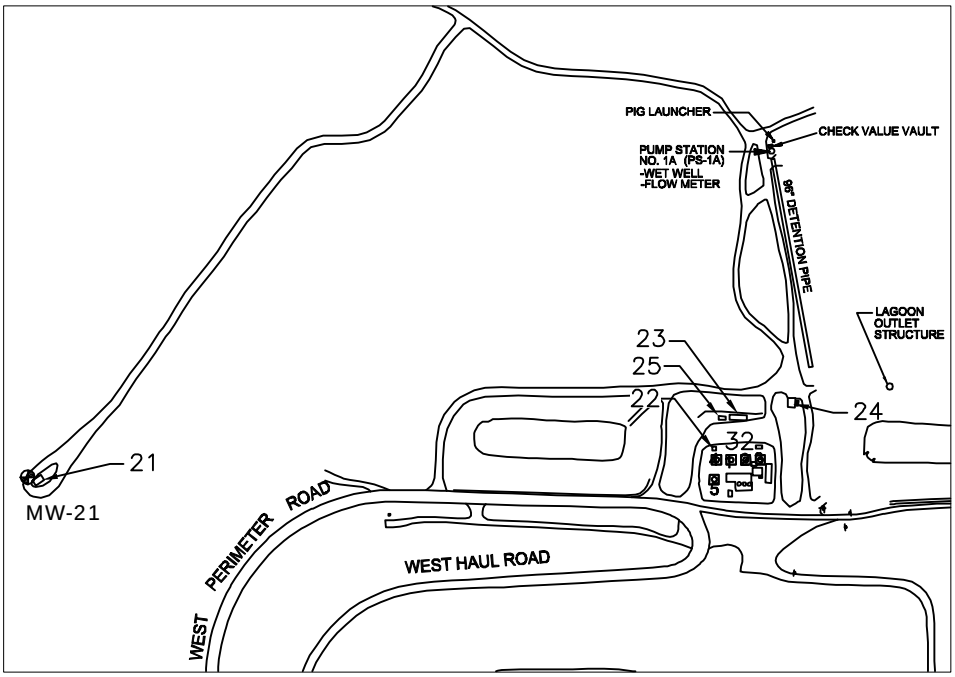
Shop and Office Buildings



BUILDING NO.	EO Description
1	Front Office
2	Conference Room
3	Vacant (Old Payroll Trailer)
4	Engineering Trailer
5	Lunch Room Trailer
6A	Dry Storage
6B	Electrician Office
7	Maintenance Shop
7A	Shop Office
7B	Stores–Shipping/Receiving
7C	Trailer Bay and Pit Area
7D	Tire Shop and Trailer Bay
7E	East Weld Shop
7F	West Weld Shop
8	Carpenter's Shop
9	Wastewater Shed
9B	Carpenter Storage
10	Scale House
11	New Eqpt. Operator's Trailer
12	EQ. Operator's Trailer (Old)
13	WW Compressor
16	Generator (Not Shown)
19	LEPS (P.S. #5)
19A	LEPS Pump Control Room
19B	LEPS/H_2O_2 room
20	LEPS, Elec Panels
21	Storage(Old PS1)
22	Storage/N.Flare
23	LFGAS Office
24	NE Generator Bldg.
25	Storage BLDG. @ N.F.S.
29	OPS Administration Office
30	Women Brk Rm.
31	Landfill Leads/Accts Payable
32	North Flare Station
33	SPOC trailer
44A	Truck Wash West Restroom
44B	Truck Wash East Restroom
44C	Pressure Wash Room
45	Heavy Equipment Canopy
46	Fuel Island
48	Operations Planning
49	CCG Faster (Not Shown)
50	Chlorine Shed

CEDAR HILLS REGIONAL LANDFILL BUILDING NUMBERS

North Flare Station



Source: KCSWD, February 2012

King County

Landfill Gas Structure Monitoring Location

Environmental Monitoring Sampling and Analysis Plan

Cedar Hills Regional Landfill, King County, Washington

DATE: February 2012	PROJECT NO.
DESIGNED BY:	
DRAWN BY:	FIGURE NO.
REVISED BY: -	

FIRST QUARTER
BUILDING MONITORING

King County

INSTRUMENT: Place check by instrument used :

Foxboro TVA 2020

SEM 500 ×

WEATHER: Sunny

DATE: 02/05/22

TECH: LD,SB

ENVIS ID		BLDG #	DESCRIPTION	CH_4 (ppm)	REMARKS	BAR PRESS (in. Hg)	TIME
GOC- 02/05/22		1	FRONT OFFICE			30.36	9:30PM
GCR- 02/05/22		2	CONF ROOM				
GAO- 02/05/22		3	PAYROLL OFFICE				
GEO- 02/05/22		4	ENGR. OFFICE				
GLRC- 02/05/22		5	LUNCHROOM				
GSPC 02/05/22			SPOC				
GELO- 02/05/22	A	6A	DRY STORAGE				
GELO- 02/05/22	B	6B	ELECTRICIAN OFFICE				
GAP- 02/05/22			ACCOUNT PAYABLE				
GSO- 02/05/22	A	7A	SHOP OFFICE				
GPR- 02/05/22	B	7B	PARTS ROOM				
GMS- 02/05/22	C	7C	SHOP PIT AREA/BAY				
GTB- 02/05/22	D	7D	SHOP TIRE BAY				
GEW- 02/05/22	E	7E	EAST WELD SHOP				
GWW- 02/05/22	F	7F	WEST WELD SHOP				
GCS- 02/05/22		8	CARPENTER'S				
GSS- 02/05/22		9	WASTEWATER				
GSS- 02/05/22	B	9B	CARPENTER/STORAGE	**NA**	REMOVED		
GSH- 02/05/22		10	SCALEHOUSE				
GB13- 02/05/22		13	WW COMPRESSOR				
GB16- 02/05/22		16	GENERATOR				
GB19- 02/05/22		19	LEPS (P.S.# 5)				
GB19- 02/05/22	B	19B	LEPS/H2O2 ROOM				
GB20- 02/05/22		20	LEPS ELEC PANALS				
GB21- 02/05/22		21	STORAGE(OLD PS 1)				
GB22- 02/05/22		22	STORAGE/N FLARE				
GB23- 02/05/22		23	LFGAS				
GB24- 02/05/22		24	NE GENERATOR BLDG				
GBWW- 02/05/22		30	WOMEN BRK RM				
GPWT- 02/05/22		PW	PRESSURE WASH RM				
GBRR- 02/05/22		RR	TRUCKWASH RR W				
GBSS- 02/05/22		SS	TRUCKWASH RR E				
GBZZ- 02/05/22		29	MANAGERS TRAILER				
GBPT- 02/05/22			CCG FASTER				
GCLS- 02/05/22			CHLORINE SHED				

Data Qualifiers

KING COUNTY SOLID WASTE DIVISION
QUALIFIER INFORMATION
(Effective 8/27/2015)

QUAL	QUALIFIER DESCRIPTION
U	Undetected; Analyte Concentration Less than Method Detection Limit (< MDL)
T	Estimated; Less than Reporting Detection Limit (<RDL) but Greater than Method Detection Limit (> MDL)
J	Reported Value is an Estimate
B	Matrix Target Analyte Present in Blank, AND, Sample Result Less than or Equal to 10x Blank Detection
C	Confluent Growth
E	Estimated; Outside Expected Accuracy
H	Exceeds Holding Time
R	Data Rejected
S	Sample Handling Errors
X	Too Numerous to Count
D	Re-analysis Due to Dilution
P	PASS – Qualitative Result Acceptable
F	FAIL – Qualitative Result is not Acceptable
G	Estimated with Low Bias (Coliform; BOD; All Other Chemistry Parameters)
L	Estimated with High Bias (BOD; All Other Chemistry Parameters)

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APPENDIX C

Meteorological Data

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/1/22 0:00	5.332	114.9	6.653	20.88	29.36	0
1/1/22 0:15	6.255	126.4	11.45	21.53	29.36	0
1/1/22 0:30	6.654	139.7	6.207	21.68	29.36	0
1/1/22 0:45	7.135	131.7	9.32	22.06	29.36	0
1/1/22 1:00	6.366	127.8	15.38	21.84	29.36	0
1/1/22 1:15	6.566	114.7	12.03	22.03	29.36	0
1/1/22 1:30	7.322	121.2	7.514	22.14	29.37	0
1/1/22 1:45	6.082	117.7	8.21	22.19	29.37	0
1/1/22 2:00	4.503	125.9	5.989	21.78	29.37	0
1/1/22 2:15	3.35	105.4	24.45	21.75	29.38	0
1/1/22 2:30	1.301	62.82	28.47	20.87	29.38	0
1/1/22 2:45	2.224	120.7	17.59	21.75	29.38	0
1/1/22 3:00	1.915	130.8	18.14	21.95	29.39	0
1/1/22 3:15	3.337	149.6	5.749	21.91	29.39	0
1/1/22 3:30	5.108	136.6	10.08	22.07	29.39	0
1/1/22 3:45	6.491	130.3	9.72	22.48	29.39	0
1/1/22 4:00	6.193	129	9.52	22.67	29.38	0
1/1/22 4:15	5.747	140.9	8.45	22.7	29.39	0
1/1/22 4:30	3.852	132.5	10.12	22.66	29.39	0
1/1/22 4:45	2.536	125.1	12.5	22.42	29.39	0
1/1/22 5:00	2.793	146.2	12.51	22.6	29.39	0
1/1/22 5:15	5.205	160.3	9.76	22.93	29.39	0
1/1/22 5:30	3.96	150.4	10.88	22.81	29.39	0
1/1/22 5:45	4.608	133.8	11.76	22.89	29.39	0
1/1/22 6:00	3.296	118.6	11.4	23.06	29.39	0
1/1/22 6:15	4.134	133.6	5.996	23.35	29.39	0
1/1/22 6:30	4.429	138.9	6.842	23.42	29.39	0
1/1/22 6:45	3.493	161.2	14.79	23.71	29.4	0
1/1/22 7:00	2.603	150.5	15.02	23.35	29.4	0
1/1/22 7:15	2.119	130.2	20.62	22.76	29.4	0
1/1/22 7:30	3.246	126.5	6.249	22.59	29.4	0
1/1/22 7:45	4.412	148.9	5.793	23.27	29.4	0
1/1/22 8:00	4.251	157.3	7.316	23.58	29.4	0
1/1/22 8:15	4.332	155.2	7.42	23.72	29.4	0
1/1/22 8:30	4.074	140.2	11.05	23.8	29.4	0
1/1/22 8:45	3.345	147.1	9.17	23.73	29.4	0
1/1/22 9:00	2.718	170.5	15.89	23.59	29.41	0
1/1/22 9:15	3.511	172.1	14.43	23.59	29.42	0
1/1/22 9:30	3.722	157.8	7.542	23.93	29.42	0
1/1/22 9:45	4.375	164.1	8.79	23.95	29.41	0
1/1/22 10:00	4.899	154.9	9.05	24.38	29.42	0
1/1/22 10:15	4.349	150	12.11	25.07	29.43	0
1/1/22 10:30	4.793	147	10.71	25.57	29.42	0
1/1/22 10:45	3.583	163.4	12.12	26.1	29.42	0
1/1/22 11:00	4.058	173.6	13.16	26.22	29.42	0
1/1/22 11:15	5.128	153.6	12.88	26.82	29.4	0
1/1/22 11:30	4.875	151.1	7.46	27.52	29.39	0
1/1/22 11:45	4.532	149	6.642	28.47	29.39	0
1/1/22 12:00	4.142	163.9	8.71	29.11	29.39	0
1/1/22 12:15	4.032	156.6	13.1	29.79	29.39	0
1/1/22 12:30	4.036	148.5	7.943	30.67	29.38	0
1/1/22 12:45	4.559	168.8	19.97	31.15	29.38	0
1/1/22 13:00	4.195	160.6	23.62	31.87	29.37	0
1/1/22 13:15	4.404	132.6	9.39	32.59	29.36	0
1/1/22 13:30	4.532	136.1	16.83	33.12	29.36	0
1/1/22 13:45	5.333	143.8	11.73	33.3	29.36	0
1/1/22 14:00	4.995	138.9	11.03	33.47	29.36	0
1/1/22 14:15	5.896	134.7	7.96	33.27	29.35	0
1/1/22 14:30	6.396	128.8	13.22	33.66	29.35	0
1/1/22 14:45	5.492	151.6	8.66	33.51	29.35	0
1/1/22 15:00	4.282	177.6	15.85	33.07	29.35	0
1/1/22 15:15	5.797	176.7	14.83	32.59	29.35	0
1/1/22 15:30	6.812	163.7	11.54	32.4	29.34	0
1/1/22 15:45	7.674	149.4	13.23	32.43	29.34	0
1/1/22 16:00	8.36	147	11.77	32.64	29.33	0
1/1/22 16:15	8.38	147.2	8.14	32.29	29.33	0
1/1/22 16:30	8.08	144.5	7.38	32.06	29.33	0
1/1/22 16:45	7.307	137	8.6	32.32	29.32	0
1/1/22 17:00	6.391	140.5	11.22	32.05	29.31	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/1/22 17:15	6.051	131.2	14.31	32.5	29.31	0
1/1/22 17:30	6.439	142.2	28.75	32.59	29.31	0
1/1/22 17:45	5.942	151.8	29.59	32.04	29.3	0
1/1/22 18:00	6.045	176.2	15.97	31.44	29.3	0
1/1/22 18:15	5.886	137.2	24.24	31.36	29.29	0
1/1/22 18:30	8.03	152.9	10.64	31.65	29.29	0
1/1/22 18:45	8.44	130	11.01	32.24	29.28	0
1/1/22 19:00	8.22	131.3	17.84	32.54	29.27	0
1/1/22 19:15	6.603	169	18.86	32.58	29.27	0
1/1/22 19:30	7.022	177.1	16.11	31.88	29.27	0
1/1/22 19:45	6.782	159.4	15.19	31.99	29.27	0
1/1/22 20:00	6.769	140.1	11.65	32.84	29.26	0
1/1/22 20:15	8.91	148	11.17	32.82	29.25	0
1/1/22 20:30	7.996	152.8	10.94	32.37	29.25	0
1/1/22 20:45	7.238	147.4	11.15	32.21	29.25	0
1/1/22 21:00	5.979	136.8	14.78	32.09	29.24	0
1/1/22 21:15	8.09	140	13.42	32.5	29.23	0
1/1/22 21:30	8.08	147.1	13.87	32.51	29.23	0
1/1/22 21:45	8.81	142.9	12.17	32.67	29.23	0
1/1/22 22:00	8.26	137.2	12.98	32.81	29.23	0
1/1/22 22:15	8.21	135.8	11.93	32.62	29.23	0
1/1/22 22:30	6.688	127.1	12.05	32.8	29.22	0
1/1/22 22:45	6.521	135.5	17.6	33.18	29.22	0
1/1/22 23:00	7.983	141.7	18.3	33.01	29.21	0
1/1/22 23:15	7.674	142.9	19.26	32.49	29.21	0
1/1/22 23:30	7.481	131.7	9.84	32.74	29.2	0
1/1/22 23:45	7.113	140.9	10.94	33.01	29.2	0
1/2/22 0:00	5.228	161	24.13	32.29	29.19	0
1/2/22 0:15	6.55	159	21.32	31.93	29.19	0
1/2/22 0:30	7.143	140.1	15.68	32.88	29.18	0
1/2/22 0:45	6.371	148.9	19.05	32.06	29.17	0
1/2/22 1:00	4.856	131.2	46.09	32.23	29.17	0
1/2/22 1:15	1.188	30.12	19.39	31.4	29.17	0
1/2/22 1:30	2.3	78.87	38.19	31.75	29.16	0
1/2/22 1:45	3.96	116.8	44.55	32	29.15	0
1/2/22 2:00	4.973	182.2	23.89	31.17	29.15	0
1/2/22 2:15	5.966	160.6	27.59	31.5	29.15	0
1/2/22 2:30	3.883	126.9	24.21	31.21	29.15	0
1/2/22 2:45	4.785	140.9	47.78	31.77	29.14	0
1/2/22 3:00	5.498	146.3	21.14	32.13	29.13	0
1/2/22 3:15	7.439	172	47.67	31.96	29.13	0
1/2/22 3:30	5.94	174.4	23.19	31.46	29.13	0
1/2/22 3:45	5.453	177.8	21.92	29.85	29.13	0
1/2/22 4:00	5.948	177.7	31.01	30.13	29.13	0
1/2/22 4:15	4.308	218.7	39.12	30.03	29.13	0
1/2/22 4:30	3.463	213.5	18.05	29.3	29.13	0
1/2/22 4:45	1.829	231.4	68.96	29.54	29.12	0
1/2/22 5:00	2.581	200	30.65	29.78	29.12	0
1/2/22 5:15	4.929	175.5	16.43	29.37	29.12	0
1/2/22 5:30	7.265	172	14.88	29.12	29.11	0
1/2/22 5:45	5.947	156.8	12.58	29.88	29.1	0
1/2/22 6:00	5.227	161.9	9.89	30.25	29.1	0
1/2/22 6:15	6.026	169.3	11.02	30.8	29.1	0
1/2/22 6:30	5.838	170.4	9.5	30.38	29.1	0
1/2/22 6:45	6.623	173.7	13.16	30.78	29.1	0
1/2/22 7:00	5.857	166.7	13.26	30.77	29.09	0
1/2/22 7:15	5.133	165.3	13.09	31.02	29.09	0
1/2/22 7:30	7.096	161.3	30.4	30.99	29.09	0
1/2/22 7:45	6.969	149.7	25.08	31.61	29.08	0
1/2/22 8:00	10.4	146.1	19.68	33.27	29.07	0
1/2/22 8:15	8.2	143.3	9.89	35.03	29.07	0
1/2/22 8:30	9.53	149.5	6.762	35.1	29.06	0
1/2/22 8:45	9.79	138.6	8.13	35.4	29.05	0
1/2/22 9:00	11.31	140.5	10.01	36.14	29.04	0
1/2/22 9:15	11	139.3	7.75	36.11	29.04	0
1/2/22 9:30	12.45	133.9	8.26	37.02	29.03	0
1/2/22 9:45	13.74	131.4	8.32	37.49	29.02	0
1/2/22 10:00	11.84	132.8	8.55	37.6	29.01	0.01
1/2/22 10:15	12.58	142.8	8.35	37.45	29.01	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/2/22 10:30	10.81	142.3	10.07	37.68	29	0
1/2/22 10:45	9.41	152.7	11.56	37.23	29	0
1/2/22 11:00	9.82	138.6	8.54	37.6	28.99	0
1/2/22 11:15	10.6	133.3	10.25	37.94	28.97	0
1/2/22 11:30	10.7	139.5	9.65	37.32	28.96	0
1/2/22 11:45	12.07	134.2	10.7	37.31	28.95	0
1/2/22 12:00	12.7	135.2	10.98	37.11	28.95	0
1/2/22 12:15	11.08	143.2	13.31	36.29	28.95	0
1/2/22 12:30	10.03	141.6	10.76	36.52	28.94	0.01
1/2/22 12:45	9.7	153.7	11.09	36.55	28.94	0
1/2/22 13:00	9.8	138.2	10.98	36.94	28.92	0.01
1/2/22 13:15	8.62	146.8	16.43	37.09	28.92	0
1/2/22 13:30	7.13	142.6	13.89	37.28	28.91	0
1/2/22 13:45	7.448	150.9	9.97	37.33	28.9	0.01
1/2/22 14:00	8.41	162.7	15.24	36.72	28.9	0.01
1/2/22 14:15	8.7	158.6	12.49	36.49	28.89	0.01
1/2/22 14:30	9.72	155.9	16.18	36.34	28.88	0.02
1/2/22 14:45	11.14	143.8	18.52	37	28.88	0.01
1/2/22 15:00	11.74	130.9	10.34	38.04	28.87	0.02
1/2/22 15:15	12.5	135.1	10.28	38.22	28.86	0.02
1/2/22 15:30	13.6	145.2	9.2	38.36	28.85	0.03
1/2/22 15:45	14.03	144.1	10.17	38.4	28.84	0.02
1/2/22 16:00	13.54	133.2	9.84	38.61	28.83	0.02
1/2/22 16:15	15.34	126.3	8.7	39.31	28.82	0.02
1/2/22 16:30	13.88	135.7	9.28	39.56	28.82	0.03
1/2/22 16:45	14	135.9	8.95	39.45	28.81	0.02
1/2/22 17:00	13.69	132.2	8	40.62	28.79	0.02
1/2/22 17:15	12.68	133.3	10.17	40.95	28.78	0.03
1/2/22 17:30	13.4	136.6	8.56	40.43	28.76	0.02
1/2/22 17:45	15.61	132	9.22	39.95	28.75	0.02
1/2/22 18:00	16.23	131.7	9.54	39.1	28.74	0.02
1/2/22 18:15	16.76	132.5	11.22	39.06	28.73	0.01
1/2/22 18:30	15.36	132	10.47	38.33	28.73	0.02
1/2/22 18:45	13.02	144.3	13.21	38.3	28.73	0.01
1/2/22 19:00	14.76	131.4	10.56	38.27	28.73	0.01
1/2/22 19:15	13.61	128.6	10.32	39.43	28.72	0.01
1/2/22 19:30	10.16	146.2	15.5	39.24	28.72	0.01
1/2/22 19:45	5.545	221.9	34.01	37.89	28.74	0.01
1/2/22 20:00	5.663	35.03	66.78	36.08	28.73	0.02
1/2/22 20:15	5.944	54.12	23.26	35.23	28.72	0.03
1/2/22 20:30	6.125	42.13	9.13	35.43	28.71	0.03
1/2/22 20:45	3.589	96	31	35.78	28.71	0.02
1/2/22 21:00	6.016	145.5	19.48	36.52	28.72	0.03
1/2/22 21:15	7.35	150.7	15.41	35.42	28.72	0.04
1/2/22 21:30	5.254	111.6	39.6	35.15	28.72	0.03
1/2/22 21:45	3.361	70.68	68.64	34.79	28.72	0.03
1/2/22 22:00	10.15	118.4	32.39	35.2	28.71	0.06
1/2/22 22:15	7.522	144.7	46.15	34.9	28.71	0.05
1/2/22 22:30	8	106.4	10.01	34.77	28.7	0.06
1/2/22 22:45	4.559	151.8	31.41	34.54	28.7	0.04
1/2/22 23:00	6.851	158	21.45	33.49	28.7	0.03
1/2/22 23:15	9.04	131.2	10.35	32.85	28.69	0.03
1/2/22 23:30	14.84	132.7	8.25	32.8	28.67	0.03
1/2/22 23:45	18	128.3	9.69	32.45	28.66	0.02
1/3/22 0:00	19.28	130.8	9.3	32.1	28.65	0.03
1/3/22 0:15	20.85	130.9	9.31	31.72	28.64	0
1/3/22 0:30	20.97	127.3	8.54	31.39	28.64	0.01
1/3/22 0:45	18.16	124.9	9.53	31.43	28.64	0.03
1/3/22 1:00	18.16	125	9.79	31.83	28.63	0.07
1/3/22 1:15	17.46	123.9	10.32	31.94	28.63	0.05
1/3/22 1:30	17.5	124.5	9.61	32.31	28.61	0.04
1/3/22 1:45	17.38	131.8	9.31	32.24	28.62	0.02
1/3/22 2:00	18.4	126.4	9.58	32.27	28.62	0.02
1/3/22 2:15	15.55	122.8	9.67	32.84	28.62	0.04
1/3/22 2:30	13.84	125.5	10.98	33.22	28.63	0.03
1/3/22 2:45	9.58	134.8	14.27	33.45	28.62	0.05
1/3/22 3:00	7.64	152.7	17.31	33.37	28.63	0.04
1/3/22 3:15	9.26	163.8	25.17	32.97	28.65	0.03
1/3/22 3:30	6.197	134.4	28.05	32.43	28.65	0.02

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/3/22 3:45	5.237	100.7	20.45	32.72	28.64	0.01
1/3/22 4:00	5.879	137.6	11.57	32.7	28.65	0.01
1/3/22 4:15	8.22	127.7	10.07	32.08	28.65	0.01
1/3/22 4:30	10.53	117	8.34	31.99	28.64	0
1/3/22 4:45	11.83	127.6	8.86	32.13	28.63	0.01
1/3/22 5:00	12.69	127.3	9.05	32.45	28.62	0
1/3/22 5:15	14.01	125.8	8.27	32.56	28.62	0.01
1/3/22 5:30	13.69	128.2	9.33	32.47	28.62	0.01
1/3/22 5:45	15.76	125.7	10.27	33.14	28.6	0.01
1/3/22 6:00	12.46	136.5	12.01	33.43	28.61	0
1/3/22 6:15	11.57	115.3	11.11	34.13	28.6	0.01
1/3/22 6:30	15.2	120.5	11.48	34.19	28.6	0
1/3/22 6:45	14.03	130.3	8.27	34.66	28.6	0.01
1/3/22 7:00	11.86	128.9	8.45	35.25	28.59	0.01
1/3/22 7:15	9.38	136.9	11.6	35.34	28.59	0.01
1/3/22 7:30	8.44	161.7	20.52	34.3	28.6	0
1/3/22 7:45	8.48	150.2	18.54	33.88	28.62	0.01
1/3/22 8:00	9.14	145.5	9.22	33.99	28.63	0
1/3/22 8:15	8.23	132.5	8.19	34.14	28.64	0.01
1/3/22 8:30	10.08	126.5	10.96	33.9	28.64	0
1/3/22 8:45	7.901	111.9	9.78	33.8	28.63	0.01
1/3/22 9:00	9	122.7	11.72	34.52	28.63	0.01
1/3/22 9:15	8.92	134.9	8.52	35.01	28.63	0
1/3/22 9:30	6.597	160.1	16.48	34.76	28.63	0
1/3/22 9:45	10.24	179.3	10.49	33.85	28.64	0.02
1/3/22 10:00	7.47	160.6	14.09	34.11	28.65	0.01
1/3/22 10:15	6.257	143.8	7.427	33.68	28.66	0.01
1/3/22 10:30	5.394	136.7	14.79	34.02	28.67	0.01
1/3/22 10:45	3.784	134	12.28	34.21	28.67	0.01
1/3/22 11:00	7.366	135.5	9.34	34.05	28.68	0.02
1/3/22 11:15	7.625	150.2	11.95	34.27	28.68	0.01
1/3/22 11:30	9.1	163.4	11.33	34.83	28.68	0.02
1/3/22 11:45	7.516	145.7	10.12	34.91	28.69	0.01
1/3/22 12:00	11.17	160	15.9	35.29	28.69	0.01
1/3/22 12:15	20.76	206.5	13.14	35.22	28.7	0.04
1/3/22 12:30	19.54	229.1	10.62	33.24	28.7	0.02
1/3/22 12:45	12.08	185.7	11.94	33.72	28.7	0.01
1/3/22 13:00	11.48	165.5	12.28	34.89	28.7	0.02
1/3/22 13:15	10.83	152.6	12.09	35.1	28.7	0
1/3/22 13:30	10.12	145.9	9.01	35.28	28.7	0.02
1/3/22 13:45	9.54	152.3	9	35.59	28.71	0.01
1/3/22 14:00	8.63	159	13.93	35.64	28.72	0.01
1/3/22 14:15	9.86	173.6	8.04	36.44	28.72	0.01
1/3/22 14:30	11.34	175.1	9.32	37.14	28.72	0.01
1/3/22 14:45	12.3	179.1	7.048	37.03	28.73	0
1/3/22 15:00	10.81	181.4	7.837	36.89	28.73	0.01
1/3/22 15:15	8.73	175	8.36	36.69	28.75	0
1/3/22 15:30	7.315	152.4	11.43	35.97	28.75	0
1/3/22 15:45	2.273	138.1	34.77	35.82	28.76	0
1/3/22 16:00	4.633	318.3	27.42	34.86	28.77	0.01
1/3/22 16:15	1.535	133.4	29.7	34.51	28.77	0
1/3/22 16:30	6.616	141.6	12.28	34.56	28.77	0
1/3/22 16:45	5.376	131.1	8.46	34.03	28.78	0
1/3/22 17:00	5.721	135.4	8.75	33.68	28.78	0
1/3/22 17:15	8.24	149.8	6.731	33.53	28.78	0
1/3/22 17:30	7.15	149.1	7.11	33.34	28.79	0
1/3/22 17:45	3.952	103.5	28.52	33.18	28.79	0
1/3/22 18:00	3.503	98.8	17.35	32.91	28.8	0
1/3/22 18:15	5.327	115.7	25.58	32.88	28.8	0
1/3/22 18:30	7.464	138.2	9.05	32.74	28.81	0
1/3/22 18:45	6.809	139.7	9.3	32.7	28.81	0
1/3/22 19:00	7.255	151.2	10.99	32.84	28.81	0
1/3/22 19:15	8.05	167.6	9.69	32.79	28.82	0
1/3/22 19:30	8.82	167.6	10.25	32.53	28.83	0
1/3/22 19:45	9.58	160.6	8.43	32.77	28.83	0
1/3/22 20:00	9.06	148.4	7.518	33	28.84	0
1/3/22 20:15	7.485	143.9	10.04	33.07	28.85	0
1/3/22 20:30	4.988	128.7	10.54	33.04	28.85	0
1/3/22 20:45	6.307	143.5	9.79	33.27	28.86	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/3/22 21:00	7.169	169.3	13.74	33.36	28.87	0
1/3/22 21:15	8.13	179.5	8.12	33.27	28.87	0
1/3/22 21:30	7.426	161.9	8.93	33.13	28.88	0
1/3/22 21:45	8.49	151.2	7.712	33.25	28.89	0
1/3/22 22:00	7.018	137.4	7.901	33.14	28.89	0
1/3/22 22:15	6.519	130.9	8.29	32.94	28.9	0
1/3/22 22:30	6.681	141.2	9.49	32.83	28.91	0
1/3/22 22:45	7.114	152.5	11.84	32.82	28.92	0
1/3/22 23:00	7.624	154.2	10.17	33.5	28.93	0
1/3/22 23:15	8.52	168.1	8.89	33.59	28.94	0
1/3/22 23:30	9.96	169	9.31	33.7	28.95	0
1/3/22 23:45	8.95	164.2	7.706	33.26	28.96	0
1/4/22 0:00	8.17	154.9	8.14	33.13	28.96	0
1/4/22 0:15	7.198	151	6.865	33.1	28.97	0
1/4/22 0:30	5.986	138	9.06	33.06	28.97	0
1/4/22 0:45	5.931	138.1	9.73	33.22	28.98	0
1/4/22 1:00	6.752	136.6	8.81	33.61	28.98	0
1/4/22 1:15	7.593	145	10.27	34.24	28.99	0
1/4/22 1:30	8.3	150.8	9.32	34.71	29	0
1/4/22 1:45	6.612	136.9	8.47	34.57	29	0
1/4/22 2:00	9.09	142.3	10.39	35.11	29.01	0
1/4/22 2:15	7.775	139.8	8.33	35.08	29.01	0
1/4/22 2:30	6.837	132.2	8.83	34.85	29.02	0
1/4/22 2:45	8.27	141.2	8.19	35.35	29.03	0
1/4/22 3:00	10.08	147.6	5.333	35.83	29.03	0
1/4/22 3:15	11.34	148.2	6.389	36.24	29.04	0
1/4/22 3:30	12.07	153.6	6.968	36.41	29.04	0
1/4/22 3:45	10.96	157.7	6.414	36.13	29.04	0
1/4/22 4:00	10.02	151.6	7.849	35.84	29.04	0
1/4/22 4:15	10.38	152.7	8.26	35.95	29.04	0
1/4/22 4:30	13.37	165.3	12.53	36.3	29.05	0
1/4/22 4:45	10.18	175.9	8.59	36.35	29.05	0
1/4/22 5:00	10.62	181.6	9.58	35.74	29.06	0.01
1/4/22 5:15	14.63	182.9	10.12	34.69	29.06	0.02
1/4/22 5:30	10.98	170.2	9.31	34.2	29.07	0
1/4/22 5:45	9.43	156.9	7.693	34.02	29.08	0.01
1/4/22 6:00	7.77	147.3	9.67	33.97	29.09	0
1/4/22 6:15	11.32	171.6	10.87	34.48	29.1	0
1/4/22 6:30	12.76	185.5	9.51	34.48	29.1	0
1/4/22 6:45	11.3	183.2	9.46	34.18	29.11	0
1/4/22 7:00	12.93	188.3	8.86	34.16	29.12	0
1/4/22 7:15	11.94	186.5	9.16	33.85	29.13	0
1/4/22 7:30	7.55	158.6	15	33.6	29.14	0
1/4/22 7:45	6.325	138.8	8.18	33.53	29.15	0
1/4/22 8:00	9.62	144	7.645	33.55	29.15	0
1/4/22 8:15	7.96	131.7	8.22	33.51	29.16	0.01
1/4/22 8:30	7.477	127	12.01	33.68	29.16	0
1/4/22 8:45	6.629	131	9.36	33.65	29.17	0
1/4/22 9:00	7.306	142.4	9.38	33.87	29.17	0
1/4/22 9:15	8.34	154.1	4.581	34.27	29.17	0
1/4/22 9:30	8.4	151	5.294	34.54	29.18	0
1/4/22 9:45	7.51	143.2	8.49	34.97	29.18	0
1/4/22 10:00	6.334	136.1	8.89	35.85	29.19	0
1/4/22 10:15	5.78	129.3	9.91	36.66	29.19	0
1/4/22 10:30	5.884	132.8	10.35	36.98	29.19	0
1/4/22 10:45	5.377	141.1	11.54	37.05	29.2	0
1/4/22 11:00	6.812	145.8	8.25	37.24	29.19	0
1/4/22 11:15	5.842	134	10.82	37.77	29.19	0
1/4/22 11:30	6.125	134.9	10.61	37.97	29.18	0
1/4/22 11:45	5.717	158.4	12.55	37.86	29.18	0
1/4/22 12:00	6.785	157.7	8.49	38	29.18	0
1/4/22 12:15	7.377	169.5	11.04	38.28	29.18	0
1/4/22 12:30	7.614	156.9	6.143	38.09	29.18	0
1/4/22 12:45	6.939	156.7	9.27	37.98	29.18	0
1/4/22 13:00	5.597	151.2	8.51	38.1	29.18	0
1/4/22 13:15	6.405	147.9	8.6	38.02	29.17	0
1/4/22 13:30	5.228	140.1	11.1	37.89	29.17	0
1/4/22 13:45	5.881	141.5	9.11	37.75	29.17	0
1/4/22 14:00	7.225	139.2	10.19	37.44	29.16	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/4/22 14:15	5.968	127	7.547	37.26	29.16	0
1/4/22 14:30	5.53	129.1	8.82	37.14	29.16	0
1/4/22 14:45	5.672	133.6	13.03	37.31	29.16	0
1/4/22 15:00	5.56	117.6	11	36.87	29.15	0
1/4/22 15:15	5.73	108.3	7.331	36.75	29.15	0
1/4/22 15:30	5.626	115.7	12.51	37.03	29.15	0
1/4/22 15:45	5.158	144.6	18.89	37.22	29.15	0
1/4/22 16:00	7.526	132.9	11.02	37.42	29.14	0
1/4/22 16:15	6.543	142.2	23.52	37.25	29.15	0.01
1/4/22 16:30	5.418	113.7	9.52	36.98	29.14	0
1/4/22 16:45	6.148	121	9.52	36.95	29.14	0
1/4/22 17:00	7.567	136.9	11.97	36.87	29.14	0.01
1/4/22 17:15	5.522	130.1	13.82	36.5	29.14	0.01
1/4/22 17:30	7.22	118.5	8.8	36.29	29.13	0
1/4/22 17:45	9.06	130.6	11.11	36.01	29.13	0.01
1/4/22 18:00	8.65	141.7	12.38	35.27	29.13	0.02
1/4/22 18:15	8.08	127.1	8.07	34.77	29.13	0.01
1/4/22 18:30	8.46	118.6	9.31	34.24	29.12	0.01
1/4/22 18:45	8.2	113.5	10.72	34.09	29.12	0
1/4/22 19:00	7.578	122.5	8.63	34.47	29.11	0
1/4/22 19:15	8.3	119.9	9.73	35.25	29.11	0.01
1/4/22 19:30	7.86	131.6	12.62	35.92	29.11	0
1/4/22 19:45	6.763	144.2	9.12	35.88	29.1	0.01
1/4/22 20:00	5.693	136.6	12.11	35.9	29.1	0.01
1/4/22 20:15	7.051	133.3	8.96	35.98	29.11	0
1/4/22 20:30	6.212	139	8.53	35.87	29.1	0
1/4/22 20:45	4.914	121	13.12	36.03	29.1	0
1/4/22 21:00	4.776	133.4	13.9	36.25	29.11	0
1/4/22 21:15	5.196	154.8	9.49	36.1	29.12	0
1/4/22 21:30	5.532	152.8	8.11	35.85	29.12	0
1/4/22 21:45	2.774	139.5	16.15	36.02	29.12	0
1/4/22 22:00	4.351	164.3	13.32	36.28	29.12	0
1/4/22 22:15	4.119	264.6	45.23	36.3	29.13	0
1/4/22 22:30	5.485	216.3	12.65	36.85	29.13	0
1/4/22 22:45	5.184	231	11.07	36.86	29.14	0
1/4/22 23:00	4.945	264.1	27.14	36.72	29.14	0
1/4/22 23:15	4.787	242.9	6.687	36.87	29.15	0
1/4/22 23:30	4.551	264.3	10.45	36.74	29.16	0
1/4/22 23:45	5.748	289.6	6.079	36.48	29.17	0
1/5/22 0:00	3.819	289.4	6.467	36.39	29.17	0
1/5/22 0:15	1.669	314.4	13.54	36.26	29.18	0
1/5/22 0:30	1.577	325.3	8.31	36.3	29.18	0
1/5/22 0:45	4.261	306.8	5.803	36.12	29.19	0
1/5/22 1:00	4.077	303	10.67	36.05	29.19	0
1/5/22 1:15	2.919	312.1	8.02	36.08	29.2	0
1/5/22 1:30	3.344	299.5	11.89	36.14	29.21	0.01
1/5/22 1:45	4.126	281	6.514	36.12	29.22	0
1/5/22 2:00	3.218	295.4	14.62	35.97	29.23	0
1/5/22 2:15	3.031	352	19.27	35.44	29.24	0
1/5/22 2:30	2.191	21.65	9.36	35.34	29.24	0
1/5/22 2:45	4.499	19.35	14.58	34.87	29.25	0
1/5/22 3:00	6.264	28.46	7.53	34.12	29.25	0
1/5/22 3:15	2.735	13.5	23.41	33.89	29.26	0.01
1/5/22 3:30	3.943	311.7	19.16	34.53	29.26	0
1/5/22 3:45	2.716	356.2	18.62	34.68	29.27	0.01
1/5/22 4:00	2.973	15.83	17.69	34.78	29.28	0
1/5/22 4:15	3.55	357.6	21.35	35.17	29.28	0
1/5/22 4:30	3.185	15.02	13.65	35.17	29.29	0
1/5/22 4:45	5.218	1.457	15.96	35.6	29.28	0
1/5/22 5:00	5.172	353.9	16.89	35.85	29.29	0
1/5/22 5:15	4.781	12.35	13.8	35.57	29.29	0
1/5/22 5:30	4.173	9.82	23.73	35.52	29.29	0
1/5/22 5:45	1.521	357.5	48.83	34.89	29.3	0
1/5/22 6:00	3.343	346.7	48.01	35.46	29.31	0
1/5/22 6:15	2.002	30.85	79.06	35.19	29.31	0
1/5/22 6:30	2.044	179.4	29.3	34.41	29.31	0
1/5/22 6:45	4.637	206.4	6.797	34.13	29.32	0
1/5/22 7:00	3.346	183.3	15.73	33.78	29.32	0
1/5/22 7:15	1.563	148.1	35.24	33.68	29.32	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/5/22 7:30	1.729	144.4	23.03	33.65	29.32	0
1/5/22 7:45	0.913	110.9	21.15	33.49	29.33	0
1/5/22 8:00	0.555	87.9	2.589	33.39	29.33	0.01
1/5/22 8:15	1.379	98.1	4.533	33.43	29.34	0
1/5/22 8:30	1.603	90.3	9.13	33.39	29.35	0
1/5/22 8:45	1.595	64.15	8.29	33.27	29.35	0
1/5/22 9:00	2.67	93.9	11.8	33.1	29.36	0.01
1/5/22 9:15	2.782	108.7	9.79	32.92	29.36	0
1/5/22 9:30	2.409	104.5	10.96	32.62	29.37	0.01
1/5/22 9:45	3.502	77.65	14.98	32.43	29.37	0.01
1/5/22 10:00	2.198	50.58	10.89	32.55	29.37	0
1/5/22 10:15	0.685	60.6	12.28	32.81	29.37	0.01
1/5/22 10:30	1.797	115.2	11.7	33.11	29.37	0
1/5/22 10:45	2.239	91.5	13.68	33.45	29.38	0
1/5/22 11:00	1.557	56.09	10.87	33.66	29.38	0
1/5/22 11:15	2.563	60.87	13.59	33.72	29.38	0
1/5/22 11:30	2.845	31.36	7.269	33.76	29.38	0
1/5/22 11:45	3.04	31.43	7.938	33.83	29.38	0
1/5/22 12:00	3.54	33.06	6.603	33.86	29.37	0
1/5/22 12:15	3.588	39.01	9.53	33.99	29.36	0
1/5/22 12:30	2.831	42.54	10.81	34.14	29.36	0
1/5/22 12:45	1.807	42.87	12.01	34.39	29.35	0
1/5/22 13:00	1.906	65.63	19.65	34.57	29.35	0.01
1/5/22 13:15	2.143	108.9	15.78	34.95	29.34	0
1/5/22 13:30	4.189	129.4	10.21	34.88	29.33	0
1/5/22 13:45	4.015	128.8	11.59	34.7	29.32	0
1/5/22 14:00	2.877	97.3	18.99	34.73	29.32	0.01
1/5/22 14:15	3.177	90.6	17.61	34.44	29.32	0
1/5/22 14:30	4.568	130.1	12.04	34.3	29.31	0
1/5/22 14:45	2.661	126.1	8.36	34.36	29.31	0
1/5/22 15:00	0.926	108.3	11.57	34.36	29.31	0.01
1/5/22 15:15	0	0	0	34.39	29.31	0
1/5/22 15:30	0.614	25.09	0.424	34.31	29.3	0
1/5/22 15:45	1.913	35.74	6.05	34.24	29.3	0
1/5/22 16:00	2.549	35.63	8.05	34.12	29.29	0.01
1/5/22 16:15	3.244	33.47	5.755	34.05	29.29	0
1/5/22 16:30	4.413	26.29	6.698	33.85	29.28	0
1/5/22 16:45	5.291	22.88	7.72	33.5	29.28	0.01
1/5/22 17:00	5.54	23.87	8.17	33.25	29.27	0
1/5/22 17:15	4.75	31.7	8.74	33.05	29.26	0.01
1/5/22 17:30	4.492	30.38	7.703	32.98	29.25	0.01
1/5/22 17:45	4.579	25.3	7.019	32.83	29.25	0
1/5/22 18:00	3.101	36.95	11.65	32.58	29.25	0.01
1/5/22 18:15	2.556	28.34	10.33	32.38	29.24	0
1/5/22 18:30	2.311	38.07	8.58	32.16	29.24	0.01
1/5/22 18:45	3.211	50.53	9.29	31.98	29.23	0
1/5/22 19:00	3.13	38.79	17.61	31.91	29.22	0.01
1/5/22 19:15	4.23	68	21.25	32.14	29.21	0
1/5/22 19:30	4.219	42.06	14.49	31.81	29.2	0
1/5/22 19:45	4.797	35.94	13.56	31.66	29.19	0
1/5/22 20:00	5.614	40.64	12.95	31.81	29.18	0.01
1/5/22 20:15	4.547	48.6	16.04	31.96	29.17	0
1/5/22 20:30	5.015	66.95	22.98	32.2	29.16	0.01
1/5/22 20:45	6.864	98.5	19.33	33.13	29.16	0.01
1/5/22 21:00	8.06	108.9	12.99	33.78	29.15	0.01
1/5/22 21:15	7.381	92.2	18.43	33.69	29.14	0.02
1/5/22 21:30	7.149	95.8	15.54	33.56	29.13	0.01
1/5/22 21:45	8.36	107.9	15.06	33.94	29.12	0.02
1/5/22 22:00	12.88	119.1	14.07	34.83	29.09	0.01
1/5/22 22:15	15.79	127.2	10.66	35.5	29.07	0.01
1/5/22 22:30	16.96	126.8	10.44	35.82	29.06	0.02
1/5/22 22:45	15.95	125.3	10.72	35.74	29.04	0
1/5/22 23:00	16.89	124.7	11.99	35.8	29.02	0
1/5/22 23:15	18.04	130.4	11.47	35.98	29	0.01
1/5/22 23:30	14.46	134.1	12.47	36.09	28.99	0
1/5/22 23:45	14.14	142.2	13.06	36.21	28.98	0.01
1/6/22 0:00	13.69	142.5	12.07	36.28	28.96	0
1/6/22 0:15	16.13	132.4	10.75	36.24	28.94	0.01
1/6/22 0:30	16.08	132.1	10.89	36.16	28.93	0.02

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/6/22 0:45	13.59	140.4	12.38	36.14	28.93	0.04
1/6/22 1:00	9.76	150.2	13.87	36.27	28.95	0.05
1/6/22 1:15	5.829	119.1	42.43	36.19	28.96	0.05
1/6/22 1:30	4.084	60.96	16.56	34.94	28.96	0.05
1/6/22 1:45	6.342	109.3	20.07	34.84	28.94	0.05
1/6/22 2:00	13.48	134.5	14.56	36.04	28.92	0.03
1/6/22 2:15	14.59	133	11.11	36.78	28.92	0.04
1/6/22 2:30	14.06	138.5	11.04	36.52	28.91	0.04
1/6/22 2:45	13.49	143.9	9.6	36.61	28.91	0.03
1/6/22 3:00	13.55	140.2	12.39	36.84	28.91	0.04
1/6/22 3:15	11.42	141.7	10.75	37.07	28.92	0.03
1/6/22 3:30	11.39	137.8	9.66	37.98	28.91	0.03
1/6/22 3:45	10.73	139.9	10.82	38.66	28.9	0.04
1/6/22 4:00	10.15	131.7	11.22	39.42	28.9	0.02
1/6/22 4:15	7.961	139.1	14.09	39.87	28.9	0.02
1/6/22 4:30	7.59	142.3	10.18	40.22	28.9	0.04
1/6/22 4:45	7.447	143.9	9.41	40.44	28.91	0.05
1/6/22 5:00	5.938	149	12.75	40.21	28.91	0.05
1/6/22 5:15	5.974	152.7	21.83	39.95	28.91	0.05
1/6/22 5:30	7.526	139.5	11.73	39.6	28.91	0.06
1/6/22 5:45	10.08	131	9.62	39.66	28.9	0.05
1/6/22 6:00	10.79	146.7	10.53	39.56	28.9	0.04
1/6/22 6:15	10.94	145.3	10.35	39.58	28.9	0.04
1/6/22 6:30	12.66	148.9	7.19	40.49	28.9	0.05
1/6/22 6:45	12.47	142.7	11	40.62	28.9	0.05
1/6/22 7:00	11.67	147.8	10.16	40.97	28.9	0.03
1/6/22 7:15	10.84	156.5	10.24	41.5	28.9	0.04
1/6/22 7:30	11.88	149.1	8.65	41.7	28.9	0.03
1/6/22 7:45	11.11	145.6	10.52	42.19	28.89	0.02
1/6/22 8:00	11.66	154.1	7.858	42.37	28.9	0.02
1/6/22 8:15	9.75	146.7	9.64	42.57	28.9	0.01
1/6/22 8:30	8.85	154.1	8.96	42.73	28.9	0.03
1/6/22 8:45	7.531	147.3	11.58	43.13	28.91	0.02
1/6/22 9:00	9.19	138.3	10.48	43.85	28.9	0.01
1/6/22 9:15	10.42	139.8	9	44.2	28.9	0.02
1/6/22 9:30	10.78	136.8	8.7	44.24	28.9	0.01
1/6/22 9:45	13.27	145.9	9.67	44.8	28.89	0.01
1/6/22 10:00	12.2	150.5	11.35	44.76	28.9	0
1/6/22 10:15	11.1	145.5	9.65	44.74	28.9	0.01
1/6/22 10:30	9.43	158.1	22.51	44.16	28.9	0.02
1/6/22 10:45	11.17	155.1	26.3	44.03	28.89	0.02
1/6/22 11:00	12.05	137.1	10.1	44.62	28.88	0.01
1/6/22 11:15	10.22	137.5	11.35	44.59	28.87	0.01
1/6/22 11:30	10.11	147.6	9.76	44.6	28.86	0.03
1/6/22 11:45	9.24	148	9.75	44.55	28.86	0.03
1/6/22 12:00	9.24	145.3	9.34	44.48	28.85	0.02
1/6/22 12:15	9.31	141.1	8.47	44.65	28.84	0.04
1/6/22 12:30	8.78	141.6	9.05	44.93	28.83	0.05
1/6/22 12:45	8.04	142.3	9.18	45.24	28.82	0.04
1/6/22 13:00	8.88	144.1	7.846	45.47	28.82	0.03
1/6/22 13:15	9.87	143.6	8.33	45.69	28.81	0.04
1/6/22 13:30	10.02	144.7	8.34	45.61	28.81	0.03
1/6/22 13:45	9.48	150.3	12.21	45.6	28.8	0.03
1/6/22 14:00	9.11	154.1	6.719	45.57	28.8	0.02
1/6/22 14:15	9.54	152.8	6.445	45.61	28.8	0.03
1/6/22 14:30	10.1	152	6.425	46.02	28.79	0.04
1/6/22 14:45	9.44	153	6.775	46.35	28.79	0.02
1/6/22 15:00	11.5	160.4	8.21	46.98	28.78	0.03
1/6/22 15:15	11.75	169.8	10.08	47.57	28.78	0.03
1/6/22 15:30	12.52	175	8.83	48.15	28.78	0.02
1/6/22 15:45	12.6	174.2	8.43	48.36	28.78	0.02
1/6/22 16:00	12.67	173.4	7.687	48.54	28.77	0.02
1/6/22 16:15	12.92	174	7.62	48.56	28.77	0.02
1/6/22 16:30	11.45	168.3	8.9	48.53	28.76	0.02
1/6/22 16:45	12.13	153.5	7.161	48.17	28.75	0.03
1/6/22 17:00	13.46	156.2	7.189	47.9	28.74	0.01
1/6/22 17:15	13.18	154.2	7.573	47.81	28.73	0.02
1/6/22 17:30	14.12	158.8	6.802	47.91	28.73	0.03
1/6/22 17:45	13.02	158.2	6.291	47.62	28.72	0.02

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/6/22 18:00	13	153.5	5.585	47.4	28.72	0.03
1/6/22 18:15	13.24	149.6	6.964	47.35	28.71	0.02
1/6/22 18:30	15.23	157.1	7.672	47.39	28.71	0.02
1/6/22 18:45	14.98	157.1	7.407	47.32	28.7	0.02
1/6/22 19:00	13.37	151.4	7.564	47.09	28.69	0.02
1/6/22 19:15	12.37	145.8	6.577	46.98	28.69	0.03
1/6/22 19:30	12.09	149.7	6.091	46.72	28.68	0.02
1/6/22 19:45	11.27	145.1	7.595	46.55	28.68	0.03
1/6/22 20:00	11.24	149.2	7.491	46.41	28.67	0.01
1/6/22 20:15	11.34	147.2	6.332	46.25	28.67	0.02
1/6/22 20:30	11.63	149.3	6.814	46	28.66	0.02
1/6/22 20:45	11.47	152.2	7.275	45.72	28.65	0.01
1/6/22 21:00	10.83	151.6	6.805	45.46	28.64	0.01
1/6/22 21:15	11.64	154.2	7.08	45.52	28.64	0.01
1/6/22 21:30	12	159.5	9.42	45.61	28.63	0
1/6/22 21:45	11.91	162.6	8.97	45.6	28.62	0.01
1/6/22 22:00	10.09	169.2	8.57	45.53	28.62	0.01
1/6/22 22:15	9.61	170.2	7.854	45.35	28.61	0.02
1/6/22 22:30	10.48	161.7	7.239	45.12	28.6	0.01
1/6/22 22:45	11.57	167.9	8.37	45.15	28.59	0.01
1/6/22 23:00	12.4	169	8.19	45.31	28.58	0.01
1/6/22 23:15	13.87	158.1	8.3	45.14	28.57	0.02
1/6/22 23:30	13.02	156.8	8.18	45.1	28.57	0
1/6/22 23:45	13.18	163.2	10.51	45.31	28.56	0.01
1/7/22 0:00	11.83	168.4	8.08	45.28	28.56	0.01
1/7/22 0:15	10.91	163.3	8.37	45.03	28.55	0.01
1/7/22 0:30	10.79	158.2	9.56	45.02	28.55	0.01
1/7/22 0:45	13.08	169.1	8.68	45.34	28.54	0.02
1/7/22 1:00	10.11	161.2	10.64	44.65	28.53	0.02
1/7/22 1:15	8.38	154.3	10.3	44.52	28.53	0.02
1/7/22 1:30	7.804	151.9	10.45	44.71	28.53	0.02
1/7/22 1:45	8.84	145.8	9.38	44.57	28.52	0.02
1/7/22 2:00	11.61	154	9.58	44.86	28.52	0.02
1/7/22 2:15	14.29	155	8.43	44.71	28.51	0.02
1/7/22 2:30	14.37	147.2	7.453	44.54	28.5	0.02
1/7/22 2:45	15.05	154.5	7.197	44.51	28.5	0
1/7/22 3:00	13.38	156.5	7.539	44.36	28.51	0
1/7/22 3:15	11.79	152.1	6.583	44.32	28.5	0.01
1/7/22 3:30	11.04	153.7	11.31	44.2	28.5	0
1/7/22 3:45	13.08	144.8	6.995	44.31	28.5	0
1/7/22 4:00	11.99	137	6.814	44.3	28.49	0.01
1/7/22 4:15	11.3	136.9	7.363	44.6	28.48	0
1/7/22 4:30	9.37	138.9	8.92	44.65	28.48	0
1/7/22 4:45	9.01	140.7	8.5	44.99	28.47	0
1/7/22 5:00	9.27	138.9	10.53	45.3	28.46	0
1/7/22 5:15	7.89	139.2	12.18	45.27	28.46	0
1/7/22 5:30	5.255	133.4	20.17	45.29	28.45	0.01
1/7/22 5:45	2.834	110	12.67	44.83	28.45	0
1/7/22 6:00	4.001	115.6	10.19	45.02	28.44	0
1/7/22 6:15	4.555	130.6	16.56	45.85	28.44	0
1/7/22 6:30	7.15	156.9	20.03	46.73	28.44	0
1/7/22 6:45	7.578	197.4	8.73	46.65	28.45	0
1/7/22 7:00	5.276	178.5	12.81	45.85	28.45	0
1/7/22 7:15	5.764	153.7	8.26	45.53	28.45	0.01
1/7/22 7:30	7.019	174.9	13.78	45.74	28.45	0
1/7/22 7:45	5.497	186.6	17.74	45.33	28.45	0
1/7/22 8:00	8.96	170.5	13.4	45.47	28.45	0.01
1/7/22 8:15	10.02	189.6	18.05	45.59	28.46	0.02
1/7/22 8:30	12.29	220.1	10.57	45.5	28.47	0.01
1/7/22 8:45	12.14	232.5	9.87	45.19	28.49	0
1/7/22 9:00	10.96	233.5	9.84	44.57	28.51	0.01
1/7/22 9:15	9.47	235.6	10.17	44.26	28.53	0
1/7/22 9:30	13.96	226.1	9.78	43.87	28.55	0
1/7/22 9:45	12.47	222.1	10.1	43.45	28.57	0
1/7/22 10:00	14.6	213.3	8.41	42.94	28.58	0.01
1/7/22 10:15	15.2	204.6	7.734	42.54	28.6	0.01
1/7/22 10:30	16.35	204.8	7.288	42.25	28.61	0
1/7/22 10:45	15.29	201	7.474	42.16	28.63	0
1/7/22 11:00	15.17	199.7	9.33	42.24	28.64	0.01

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/7/22 11:15	18.16	203.5	8.82	42	28.66	0
1/7/22 11:30	20.95	206.2	9.22	41.45	28.67	0.01
1/7/22 11:45	17.37	212.4	10.96	41.14	28.69	0
1/7/22 12:00	17.11	205.7	10.17	41.07	28.7	0
1/7/22 12:15	21.41	214.3	9.11	40.75	28.71	0
1/7/22 12:30	17.37	215.5	9.89	40.09	28.73	0
1/7/22 12:45	15.91	209.2	11.41	39.8	28.76	0.01
1/7/22 13:00	14.24	188.9	13.63	39.59	28.77	0
1/7/22 13:15	17.58	187.4	10.73	39.42	28.78	0
1/7/22 13:30	15.95	196	12.79	39.4	28.79	0
1/7/22 13:45	18.81	201.8	10.32	39.73	28.8	0
1/7/22 14:00	23.76	207	12.15	39.6	28.81	0
1/7/22 14:15	22.78	202.9	9.95	39.56	28.81	0
1/7/22 14:30	23.59	212.5	9.42	39.38	28.82	0
1/7/22 14:45	19.15	204	9.67	39.18	28.84	0
1/7/22 15:00	26.64	213.3	7.787	38.58	28.84	0
1/7/22 15:15	20.12	202.6	8.46	38.18	28.86	0
1/7/22 15:30	18.56	197.1	8.73	37.84	28.87	0
1/7/22 15:45	18.23	190.1	10.21	37.74	28.88	0
1/7/22 16:00	17.06	190	10.57	37.67	28.88	0
1/7/22 16:15	14.33	192.5	9.3	37.69	28.89	0
1/7/22 16:30	13.52	190.7	9.9	37.7	28.9	0
1/7/22 16:45	14.96	191.1	8.66	37.66	28.91	0
1/7/22 17:00	15.88	188.5	8.88	37.49	28.91	0
1/7/22 17:15	14.81	192.4	9.59	37.22	28.92	0
1/7/22 17:30	16.05	188.9	9.46	37.08	28.93	0
1/7/22 17:45	15.14	182.6	8.48	36.9	28.94	0
1/7/22 18:00	14.47	187.2	10.41	36.9	28.94	0
1/7/22 18:15	14.76	193.7	13.82	36.92	28.96	0
1/7/22 18:30	12.33	202.9	9.63	36.87	28.97	0
1/7/22 18:45	12.49	193.3	12.66	36.77	28.98	0
1/7/22 19:00	14.8	186.9	11.15	36.67	28.99	0
1/7/22 19:15	12.77	190.4	9.62	36.52	29	0
1/7/22 19:30	13.69	199	13.1	36.53	29.01	0
1/7/22 19:45	13.26	207.6	11.09	36.58	29.02	0
1/7/22 20:00	13.43	206.2	9.88	36.56	29.02	0
1/7/22 20:15	13.05	207.7	11.34	36.49	29.04	0
1/7/22 20:30	11.39	203.2	12.99	36.31	29.04	0
1/7/22 20:45	12.82	201.6	10.5	36.11	29.05	0
1/7/22 21:00	11.39	203	8.76	36.08	29.06	0
1/7/22 21:15	10.49	214	10.24	36.18	29.06	0
1/7/22 21:30	11.34	208.7	13.02	36.12	29.06	0
1/7/22 21:45	10.33	207.9	9.12	35.99	29.06	0
1/7/22 22:00	10.27	219.6	12.6	36.01	29.07	0
1/7/22 22:15	11.42	232.2	11.82	35.82	29.07	0
1/7/22 22:30	9.26	236.5	8.97	35.48	29.08	0
1/7/22 22:45	10.44	229.9	9.17	35.36	29.09	0
1/7/22 23:00	9.03	218.5	11.88	35.43	29.1	0
1/7/22 23:15	6.109	208.5	11.41	35.44	29.11	0
1/7/22 23:30	5.696	191.7	14.11	35.43	29.12	0
1/7/22 23:45	6.069	182.2	7.616	35.44	29.14	0
1/8/22 0:00	5.983	182.4	7.227	35.46	29.14	0
1/8/22 0:15	6.895	182.4	6.726	35.43	29.15	0
1/8/22 0:30	8.57	188	10.38	35.4	29.15	0
1/8/22 0:45	8.1	192.7	10.52	35.38	29.16	0
1/8/22 1:00	7.204	193.9	10.27	35.52	29.16	0
1/8/22 1:15	9.07	182	9.48	35.63	29.17	0
1/8/22 1:30	7.395	192.7	10.46	35.69	29.18	0
1/8/22 1:45	7.215	189.8	8.25	35.55	29.19	0
1/8/22 2:00	8.55	180.9	7.967	35.52	29.2	0
1/8/22 2:15	8.71	188.3	8.91	35.62	29.21	0
1/8/22 2:30	8.43	188.1	9.5	35.62	29.21	0
1/8/22 2:45	8.34	195.5	10.84	35.68	29.22	0
1/8/22 3:00	8.75	203.1	7.045	35.8	29.23	0
1/8/22 3:15	7.455	202.5	8.51	35.87	29.24	0
1/8/22 3:30	7.138	198.7	6.862	35.79	29.24	0
1/8/22 3:45	6.529	202.9	9.78	35.82	29.23	0
1/8/22 4:00	5.419	199	12.22	35.8	29.23	0
1/8/22 4:15	5.496	197.7	7.997	35.76	29.24	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/8/22 4:30	4.565	188.1	13.35	35.7	29.24	0
1/8/22 4:45	4.35	175.1	44.96	35.71	29.25	0
1/8/22 5:00	2.565	75.05	71.36	35.64	29.25	0
1/8/22 5:15	4.026	163.5	11.46	35.53	29.26	0
1/8/22 5:30	3.838	183.3	13.41	35.54	29.26	0
1/8/22 5:45	2.424	154.1	23.68	35.49	29.27	0
1/8/22 6:00	1.588	163.9	17.47	35.59	29.28	0
1/8/22 6:15	0.825	109.8	42.4	35.55	29.28	0
1/8/22 6:30	1.055	88.2	9.72	35.24	29.29	0
1/8/22 6:45	2.358	115.9	11.16	35.46	29.3	0
1/8/22 7:00	4.158	122.1	6.755	35.68	29.3	0
1/8/22 7:15	4.708	124	7.474	35.76	29.31	0
1/8/22 7:30	4.393	129.5	9.66	35.52	29.31	0
1/8/22 7:45	5.125	136.9	8.34	35.7	29.32	0
1/8/22 8:00	4.886	135	7.082	35.73	29.33	0
1/8/22 8:15	4.249	131.6	7.948	35.77	29.33	0
1/8/22 8:30	3.646	137.7	9.8	35.72	29.34	0
1/8/22 8:45	3.272	145.6	11.18	35.79	29.35	0
1/8/22 9:00	3.577	154.3	10.44	36.29	29.36	0
1/8/22 9:15	3.479	153.7	9.31	36.62	29.36	0
1/8/22 9:30	3.558	155.7	9.6	36.86	29.37	0
1/8/22 9:45	3.042	130.1	13.06	37.23	29.38	0
1/8/22 10:00	3.365	129.9	9.09	37.62	29.39	0
1/8/22 10:15	4.022	138.3	10.27	38.12	29.39	0
1/8/22 10:30	5.424	161.2	13.26	38.56	29.39	0
1/8/22 10:45	6.877	172.2	9.99	38.92	29.4	0
1/8/22 11:00	6.222	169.5	12.83	39.39	29.4	0
1/8/22 11:15	5.636	161.4	14.19	39.52	29.4	0
1/8/22 11:30	6.023	172.6	10.43	40.03	29.4	0
1/8/22 11:45	7.384	179.6	9.33	40.21	29.4	0
1/8/22 12:00	5.945	181.5	15.37	40.3	29.4	0
1/8/22 12:15	4.982	170.9	17.84	40.6	29.4	0
1/8/22 12:30	6.054	146	14.11	41.2	29.4	0
1/8/22 12:45	7.986	159.8	14.98	41.24	29.39	0
1/8/22 13:00	8.65	172.3	16.17	41.54	29.39	0
1/8/22 13:15	6.657	172.2	9.4	41.95	29.39	0
1/8/22 13:30	7.634	172.5	12.65	42.02	29.4	0
1/8/22 13:45	8.55	184.5	13.8	42.28	29.4	0
1/8/22 14:00	9.68	175.7	12.12	43.26	29.4	0
1/8/22 14:15	10.76	176.9	12.64	43.27	29.4	0
1/8/22 14:30	9.27	189.3	12.72	43.17	29.4	0
1/8/22 14:45	12.2	190.6	10.29	42.97	29.4	0
1/8/22 15:00	12.51	203.7	9.03	42.7	29.41	0
1/8/22 15:15	7.21	210.5	10.43	42.64	29.41	0
1/8/22 15:30	6.353	208.2	8.15	42.58	29.42	0
1/8/22 15:45	5.878	208.2	8.79	42.5	29.42	0
1/8/22 16:00	6.731	213.9	6.974	42.4	29.43	0
1/8/22 16:15	5.755	205.3	14.71	42.16	29.43	0
1/8/22 16:30	5.284	169.6	12.36	41.99	29.43	0
1/8/22 16:45	3.072	158.4	15.04	41.69	29.44	0
1/8/22 17:00	4.098	140.9	6.22	41.09	29.44	0
1/8/22 17:15	2.702	145.2	25.71	40.85	29.44	0
1/8/22 17:30	4.796	154.6	11.85	40.88	29.44	0
1/8/22 17:45	5.282	139.7	6.733	40.57	29.44	0
1/8/22 18:00	5.085	132.3	7.253	40.24	29.44	0
1/8/22 18:15	5.151	126.9	12.31	40.11	29.44	0
1/8/22 18:30	5.305	117.7	8.24	40.05	29.44	0
1/8/22 18:45	5.61	130.1	11.09	39.81	29.45	0
1/8/22 19:00	5.441	139.7	10.91	39.38	29.45	0
1/8/22 19:15	6.121	130.6	11.99	39.09	29.44	0
1/8/22 19:30	6.346	120.5	7.06	39.13	29.44	0
1/8/22 19:45	5.694	126.6	6.312	39.15	29.43	0
1/8/22 20:00	4.994	137.9	9.32	39.15	29.44	0
1/8/22 20:15	5.25	133.6	9.05	38.97	29.44	0
1/8/22 20:30	4.423	122.8	7.671	38.8	29.44	0
1/8/22 20:45	2.084	95.1	28.93	38.22	29.44	0
1/8/22 21:00	2.445	43.88	9.59	37.29	29.44	0
1/8/22 21:15	2.1	42.24	8.82	36.98	29.45	0
1/8/22 21:30	3.208	77.2	21.21	36.95	29.45	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/8/22 21:45	3.502	113.1	9.1	37.23	29.45	0
1/8/22 22:00	2.499	113.4	8.82	37.38	29.45	0
1/8/22 22:15	2.279	88.2	13.09	37	29.45	0
1/8/22 22:30	3.123	56.94	13.18	36.29	29.45	0
1/8/22 22:45	2.801	91.8	11.28	35.26	29.45	0
1/8/22 23:00	2.528	55.03	18.31	35.59	29.45	0
1/8/22 23:15	2.657	55.18	5.774	35.66	29.45	0
1/8/22 23:30	2.439	65.13	4.452	36.43	29.45	0
1/8/22 23:45	2.642	64.98	18.88	36.92	29.46	0
1/9/22 0:00	2.755	75.42	20.07	35.81	29.45	0
1/9/22 0:15	3.523	92.8	6.363	35.18	29.45	0
1/9/22 0:30	3.033	113	16.28	36.38	29.44	0
1/9/22 0:45	3.798	154.6	18.8	37.56	29.44	0
1/9/22 1:00	2.123	98.8	25.15	35.34	29.44	0
1/9/22 1:15	1.492	62.1	8.89	35.58	29.44	0
1/9/22 1:30	1.823	92.8	12.39	36.09	29.45	0
1/9/22 1:45	2.49	79.68	18.87	36.7	29.45	0
1/9/22 2:00	4.206	102.7	6.608	35.41	29.45	0
1/9/22 2:15	2.601	109.9	9.53	36.96	29.45	0
1/9/22 2:30	1.769	83.3	21.12	37.33	29.45	0
1/9/22 2:45	0.019	53.47	0.59	37.1	29.46	0
1/9/22 3:00	1.753	65.78	13.04	36.85	29.45	0
1/9/22 3:15	2.601	68.94	6.594	35.63	29.45	0
1/9/22 3:30	3.622	80.2	10.97	35.54	29.45	0
1/9/22 3:45	1.632	69.3	21.62	35.88	29.45	0
1/9/22 4:00	1.831	41.04	6.349	36.15	29.44	0
1/9/22 4:15	1.208	28.19	5.465	37.98	29.44	0
1/9/22 4:30	0.469	159.5	6.069	38.99	29.44	0
1/9/22 4:45	1.935	27.63	13.55	37.76	29.44	0
1/9/22 5:00	4.593	20.69	5.041	35.77	29.44	0
1/9/22 5:15	4.555	17.15	5.454	35.62	29.44	0
1/9/22 5:30	3.824	30.35	10.59	35.46	29.44	0
1/9/22 5:45	4.501	37.19	8.02	35.03	29.44	0
1/9/22 6:00	4.489	23.8	9.19	35.37	29.44	0
1/9/22 6:15	4.651	7.611	8.5	37.12	29.45	0
1/9/22 6:30	4.025	30.46	6.988	36.73	29.45	0
1/9/22 6:45	4.976	22.67	8.8	35.43	29.44	0
1/9/22 7:00	5.679	18.03	9.34	35.27	29.44	0
1/9/22 7:15	5.73	21.76	10.15	35.23	29.44	0
1/9/22 7:30	5.943	35.78	10.88	34.17	29.43	0
1/9/22 7:45	3.414	72.59	84.2	37.96	29.43	0
1/9/22 8:00	3.935	92.7	82.1	40.39	29.44	0
1/9/22 8:15	2.076	350.1	34.71	36.36	29.44	0
1/9/22 8:30	3.915	164.2	18.16	40.57	29.44	0
1/9/22 8:45	3.697	172.6	22.45	40.63	29.45	0
1/9/22 9:00	2.154	90.5	37.66	38.93	29.45	0
1/9/22 9:15	3.538	95.2	23.29	41.01	29.45	0
1/9/22 9:30	8.24	116.7	11.04	44.19	29.46	0
1/9/22 9:45	7.956	118.8	10.46	44.71	29.46	0
1/9/22 10:00	9.35	118.2	8.78	44.91	29.45	0
1/9/22 10:15	7.63	124.5	11.96	46.18	29.45	0
1/9/22 10:30	8.11	128.4	10.81	47.96	29.45	0
1/9/22 10:45	7.548	117.9	13.98	48.53	29.45	0
1/9/22 11:00	8.6	123.1	11.45	48.67	29.44	0
1/9/22 11:15	6.014	121.9	24.53	50.29	29.44	0
1/9/22 11:30	5.997	126.8	18.77	51.24	29.44	0
1/9/22 11:45	6.391	120.4	15.92	51.99	29.43	0
1/9/22 12:00	9.6	127.7	10.53	52.19	29.43	0
1/9/22 12:15	8.23	122.3	17.76	52.38	29.43	0
1/9/22 12:30	12.3	120.1	22.41	52.55	29.43	0
1/9/22 12:45	5.985	88.1	23.17	50.97	29.42	0
1/9/22 13:00	4.763	108.5	20.82	52.35	29.43	0
1/9/22 13:15	4.432	74.7	37.64	50.98	29.43	0
1/9/22 13:30	7.488	107.5	25.94	52.35	29.42	0
1/9/22 13:45	8.85	115.3	17.2	53.35	29.42	0
1/9/22 14:00	10.42	130.6	12.42	54.12	29.42	0
1/9/22 14:15	12.03	139.3	12.21	54.11	29.42	0
1/9/22 14:30	12.68	141.1	10.58	53.98	29.42	0
1/9/22 14:45	15.03	142.8	10.2	53.79	29.43	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/9/22 15:00	16.04	135.3	12.15	53.71	29.43	0
1/9/22 15:15	15.32	133.2	11.43	53.49	29.43	0
1/9/22 15:30	13.31	135.1	14.07	53.22	29.43	0
1/9/22 15:45	12.69	137.9	14.21	52.99	29.43	0
1/9/22 16:00	15.33	141.6	9.9	52.7	29.43	0
1/9/22 16:15	15.17	139	10.28	52.13	29.44	0
1/9/22 16:30	14.33	133.7	10.61	51.57	29.44	0
1/9/22 16:45	13.25	131.4	11.31	50.89	29.44	0
1/9/22 17:00	12.78	131.3	9.08	50.21	29.45	0
1/9/22 17:15	11.83	125.8	10.18	49.65	29.45	0
1/9/22 17:30	11.43	126.5	10.48	49.24	29.45	0
1/9/22 17:45	12.99	137.5	9.67	48.68	29.45	0
1/9/22 18:00	12.18	140.7	10.15	48.31	29.45	0
1/9/22 18:15	11.74	133.2	10.88	48.33	29.45	0
1/9/22 18:30	11.23	134	9.04	48.44	29.45	0
1/9/22 18:45	10.85	129.5	11.47	48.2	29.45	0
1/9/22 19:00	14.57	131.6	11.22	48.41	29.44	0
1/9/22 19:15	14.19	130.5	9.52	48.73	29.44	0
1/9/22 19:30	15.47	130.7	11.02	48.71	29.44	0
1/9/22 19:45	15.57	129	10.95	48.66	29.44	0
1/9/22 20:00	15.67	127.8	10.12	48.4	29.43	0
1/9/22 20:15	14.58	128.5	11.01	48.17	29.43	0
1/9/22 20:30	15.47	127.8	10.61	48.08	29.43	0
1/9/22 20:45	13.07	127.5	11.24	47.86	29.44	0
1/9/22 21:00	10.01	120.8	15.16	47.48	29.44	0
1/9/22 21:15	11.16	121.2	12.33	47.18	29.44	0
1/9/22 21:30	11.43	123	12.47	47.06	29.44	0
1/9/22 21:45	10.82	129.7	13.11	46.89	29.45	0
1/9/22 22:00	8.81	125.8	15	46.57	29.45	0
1/9/22 22:15	7.259	123.8	17.29	46.32	29.45	0
1/9/22 22:30	4.745	108.8	24.16	45.99	29.45	0
1/9/22 22:45	6.037	140.3	16.72	45.78	29.46	0
1/9/22 23:00	7.322	117.2	16.3	46	29.46	0
1/9/22 23:15	10.93	120.7	13.1	46.37	29.46	0
1/9/22 23:30	8.61	124.8	15.19	46.51	29.46	0
1/9/22 23:45	9.91	116.2	16.23	46.36	29.46	0
1/10/22 0:00	7.671	109.6	17.19	45.97	29.46	0
1/10/22 0:15	7.459	118.1	17.35	45.65	29.46	0
1/10/22 0:30	6.398	96.4	21.88	45.45	29.46	0
1/10/22 0:45	7.08	105.3	16.24	45.19	29.46	0
1/10/22 1:00	7.418	128.5	14.93	45.33	29.46	0
1/10/22 1:15	8.49	128	11.99	44.84	29.45	0
1/10/22 1:30	8.2	126.6	13.22	44.69	29.45	0
1/10/22 1:45	8.08	120.6	12.11	44.59	29.45	0
1/10/22 2:00	8.48	120.6	12.34	44.47	29.45	0
1/10/22 2:15	8.54	134.4	12.27	44.43	29.44	0
1/10/22 2:30	8.1	132.7	11.35	44.65	29.44	0
1/10/22 2:45	7.029	140.1	11.21	44.65	29.45	0
1/10/22 3:00	8.3	148	11.39	45.12	29.44	0
1/10/22 3:15	7.397	139.3	11.92	45.11	29.44	0
1/10/22 3:30	6.46	139	13.52	44.97	29.44	0
1/10/22 3:45	7.737	145.8	14.66	44.5	29.44	0
1/10/22 4:00	8.12	152.1	10.46	44.75	29.44	0
1/10/22 4:15	9.16	140	11.42	44.44	29.44	0
1/10/22 4:30	5.718	119.6	18.64	43.72	29.44	0
1/10/22 4:45	9.07	147.2	12.05	43.63	29.44	0
1/10/22 5:00	10.14	182.4	10.47	44.01	29.44	0
1/10/22 5:15	8.88	185.6	7.554	42.96	29.45	0
1/10/22 5:30	8.92	148.4	14.45	43.67	29.44	0
1/10/22 5:45	9.09	174.2	17.7	43.97	29.44	0
1/10/22 6:00	10.83	177.8	10.69	44.13	29.44	0
1/10/22 6:15	10.56	169	13.01	44.71	29.43	0
1/10/22 6:30	10.73	160.9	15.77	44.97	29.43	0
1/10/22 6:45	11.37	147	9.55	45.9	29.43	0
1/10/22 7:00	12.32	145.4	9.4	46.65	29.43	0
1/10/22 7:15	12.4	132.6	11.85	46.77	29.44	0
1/10/22 7:30	10.39	139.5	12.43	47.13	29.45	0
1/10/22 7:45	12.04	230.5	47.67	44.78	29.48	0
1/10/22 8:00	14.54	266.6	8.49	41.07	29.51	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/10/22 8:15	7.27	304.1	14.07	40.3	29.53	0
1/10/22 8:30	1.804	80.7	42.95	39.74	29.56	0.03
1/10/22 8:45	1.655	29.3	69.02	39.5	29.56	0.03
1/10/22 9:00	3.355	90.9	19.51	39.12	29.57	0.03
1/10/22 9:15	9.19	104.3	7.513	38.65	29.56	0.03
1/10/22 9:30	10.44	120.1	11.86	39.75	29.55	0
1/10/22 9:45	12.6	120.7	10.78	40.71	29.54	0.01
1/10/22 10:00	7.737	110.3	19.9	41.25	29.55	0
1/10/22 10:15	5.857	132.7	27.73	41.39	29.55	0
1/10/22 10:30	5.2	145.8	34.95	40.62	29.54	0
1/10/22 10:45	1.456	59.97	37.08	41.17	29.54	0
1/10/22 11:00	2.25	40.02	24.04	40.92	29.54	0
1/10/22 11:15	3.412	127.2	29.16	41.72	29.54	0
1/10/22 11:30	5.71	124.7	16.41	42.85	29.53	0
1/10/22 11:45	6.425	131.1	15.44	43.58	29.52	0.01
1/10/22 12:00	5.011	130.4	25.63	43.96	29.52	0
1/10/22 12:15	4.533	118.8	27.41	44.53	29.51	0
1/10/22 12:30	4.847	108.4	18.51	44.93	29.51	0
1/10/22 12:45	6.235	121.6	13.55	45.27	29.51	0
1/10/22 13:00	6.574	141.7	16.12	45.32	29.51	0
1/10/22 13:15	5.431	125.2	25.83	45.67	29.5	0
1/10/22 13:30	4.526	103.4	25.62	45.77	29.5	0
1/10/22 13:45	6.146	117.8	22.37	46.84	29.5	0
1/10/22 14:00	5.366	148.6	17.35	47.54	29.51	0
1/10/22 14:15	6.121	163.6	26.72	47.52	29.52	0
1/10/22 14:30	5.509	137.3	26.24	48.11	29.52	0
1/10/22 14:45	4.868	167	21.19	47.44	29.52	0
1/10/22 15:00	6.568	138.6	15.69	47.88	29.52	0
1/10/22 15:15	7.605	125.4	10.41	48.24	29.52	0
1/10/22 15:30	6.158	135.7	10.96	48.15	29.52	0
1/10/22 15:45	6.529	116.6	14.2	48	29.52	0
1/10/22 16:00	5.012	108.8	12.85	47.27	29.52	0
1/10/22 16:15	5.953	137.7	9.15	47.63	29.52	0
1/10/22 16:30	6.189	143.3	12.42	47.49	29.51	0
1/10/22 16:45	4.849	140.7	15.78	47.2	29.52	0
1/10/22 17:00	5.47	122.6	11.44	47.3	29.52	0
1/10/22 17:15	6.151	124.7	11.65	47.37	29.51	0
1/10/22 17:30	5.522	148.5	11.28	47.19	29.51	0
1/10/22 17:45	6.606	151.5	12.35	47.38	29.51	0
1/10/22 18:00	6.354	138.5	17.36	46.92	29.5	0
1/10/22 18:15	6.719	130.9	13.35	47.11	29.49	0
1/10/22 18:30	7.451	139.6	13.6	47.6	29.49	0
1/10/22 18:45	6.068	136.7	16.4	47.5	29.48	0
1/10/22 19:00	6.676	160.2	23.82	47.32	29.48	0
1/10/22 19:15	6.477	156.6	27.47	47.16	29.49	0
1/10/22 19:30	6.282	123.6	12.29	47.27	29.49	0
1/10/22 19:45	7.166	116.6	10.03	47.43	29.48	0
1/10/22 20:00	5.805	139.1	13.02	47.34	29.47	0
1/10/22 20:15	6.019	127.1	8.84	47.06	29.46	0
1/10/22 20:30	6.556	132.3	12.36	47.62	29.46	0
1/10/22 20:45	6.284	129.5	13.02	48.05	29.45	0
1/10/22 21:00	7.855	131.8	13.07	48.45	29.44	0
1/10/22 21:15	9.33	156	14.71	48.29	29.43	0
1/10/22 21:30	9.89	154.9	9.84	48.2	29.43	0
1/10/22 21:45	9.82	139.5	13.2	48.35	29.43	0
1/10/22 22:00	10.34	129.1	8.77	49.47	29.42	0
1/10/22 22:15	10.18	136.3	12.49	49.82	29.42	0
1/10/22 22:30	9.73	141.2	8.6	49.32	29.42	0
1/10/22 22:45	10.22	129.5	8.31	49.5	29.41	0
1/10/22 23:00	10.26	134.8	8.59	49.58	29.41	0
1/10/22 23:15	10.24	130.1	8.34	48.84	29.41	0.01
1/10/22 23:30	12.89	126.6	7.774	48.84	29.41	0.01
1/10/22 23:45	13.15	126.4	8.79	48.74	29.4	0.01
1/11/22 0:00	12.2	125.9	9.72	48.81	29.39	0.01
1/11/22 0:15	9.6	126.6	9.71	48.39	29.39	0.01
1/11/22 0:30	10.28	119.2	11.01	48.6	29.38	0
1/11/22 0:45	11.54	132.9	11.18	49.35	29.37	0
1/11/22 1:00	12.45	134.6	10.32	49.63	29.37	0
1/11/22 1:15	11.6	138.7	10.11	49.32	29.37	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/11/22 1:30	9.17	142.9	10.25	49.25	29.37	0
1/11/22 1:45	7.587	221.5	43.78	46.62	29.39	0.02
1/11/22 2:00	7.305	258.1	13.74	44.57	29.41	0.05
1/11/22 2:15	2.103	90.1	35.6	44.67	29.41	0.04
1/11/22 2:30	4.076	28.54	18.98	44.22	29.42	0.02
1/11/22 2:45	5.856	283.4	34.66	44.21	29.42	0.01
1/11/22 3:00	1.922	114.2	15.47	44.82	29.42	0.04
1/11/22 3:15	3.441	102.4	12.55	44.38	29.42	0.02
1/11/22 3:30	6.114	111.3	8.59	44.77	29.41	0.01
1/11/22 3:45	5.673	137.1	7.659	46.11	29.41	0.01
1/11/22 4:00	5.327	134.9	7.284	47.12	29.4	0.02
1/11/22 4:15	2.751	106.1	29.13	46.83	29.4	0.02
1/11/22 4:30	4.246	111.1	20.77	47.19	29.4	0.03
1/11/22 4:45	7.326	125.7	6.562	47.1	29.39	0.02
1/11/22 5:00	7.686	117.7	9.26	47.74	29.39	0.03
1/11/22 5:15	9.46	121.7	8.79	47.94	29.39	0.01
1/11/22 5:30	9.29	121.7	8.02	48.13	29.4	0
1/11/22 5:45	9.51	117.5	9.99	48.34	29.39	0.02
1/11/22 6:00	8.13	111.2	9.4	48.79	29.4	0.02
1/11/22 6:15	8.79	129.8	11.7	48.8	29.4	0.06
1/11/22 6:30	4.524	93.5	24.81	48.82	29.4	0.02
1/11/22 6:45	2.917	43	25.42	48.32	29.4	0.02
1/11/22 7:00	1.768	42.99	56.69	48.47	29.41	0.02
1/11/22 7:15	4.558	134.9	9.07	49.34	29.41	0.04
1/11/22 7:30	4.139	117.7	10.33	49.15	29.41	0.05
1/11/22 7:45	3.263	77.28	15.09	49.14	29.41	0.03
1/11/22 8:00	5.169	112.5	13.56	49.09	29.41	0.03
1/11/22 8:15	3.423	127.2	10.96	49.16	29.42	0.02
1/11/22 8:30	3.551	156	30.58	49.02	29.42	0.02
1/11/22 8:45	4.378	137.9	9.57	49.14	29.42	0.01
1/11/22 9:00	5.302	125.1	8.75	48.91	29.43	0.01
1/11/22 9:15	6.421	119.4	6.96	49.11	29.42	0.01
1/11/22 9:30	6.682	129.1	6.957	49.66	29.43	0
1/11/22 9:45	7.257	125.4	7.492	49.72	29.42	0.01
1/11/22 10:00	5.564	127.2	7.018	49.85	29.42	0.01
1/11/22 10:15	4.884	130.1	5.954	49.91	29.43	0.01
1/11/22 10:30	2.989	225.2	88.1	49.41	29.43	0.02
1/11/22 10:45	1.373	349.7	54.84	48.94	29.43	0.01
1/11/22 11:00	1.918	134.2	34.62	48.64	29.43	0.01
1/11/22 11:15	2.874	121.5	12.19	48.63	29.43	0.01
1/11/22 11:30	3.003	122.8	11.89	49.53	29.42	0.01
1/11/22 11:45	3.067	152.8	27.26	49.04	29.41	0.01
1/11/22 12:00	4.326	148.5	22.62	48.85	29.4	0
1/11/22 12:15	4.314	147.6	12.88	48.75	29.39	0.01
1/11/22 12:30	5.745	134.4	10.41	49.12	29.38	0
1/11/22 12:45	6.624	136.9	8.65	49.71	29.37	0.01
1/11/22 13:00	7.612	132.5	9.91	50.01	29.36	0
1/11/22 13:15	7.453	135.6	13.76	50.38	29.36	0
1/11/22 13:30	7.047	144.1	11.76	50.39	29.35	0
1/11/22 13:45	6.947	146.1	12.08	50.24	29.34	0
1/11/22 14:00	5.785	156.9	15.84	50.22	29.34	0.01
1/11/22 14:15	6.59	143.8	11.68	49.62	29.33	0.02
1/11/22 14:30	7.326	126.9	8.63	49.92	29.33	0.03
1/11/22 14:45	7.305	124.7	9.08	50.23	29.32	0.02
1/11/22 15:00	6.086	131.8	10.16	50.38	29.32	0.03
1/11/22 15:15	5.757	126.7	9.08	50.25	29.32	0.04
1/11/22 15:30	8.04	120.8	7.865	50.26	29.32	0.02
1/11/22 15:45	7.665	121.4	9.6	50.41	29.32	0.01
1/11/22 16:00	5.969	125.6	10.43	50.46	29.32	0.01
1/11/22 16:15	7.453	130.3	11.12	50.28	29.32	0.01
1/11/22 16:30	9.71	133.3	8.37	50.44	29.31	0
1/11/22 16:45	9.48	134.5	8.73	50.54	29.31	0.01
1/11/22 17:00	9.92	133.1	8.43	50.62	29.3	0
1/11/22 17:15	12.15	142.3	8.25	50.99	29.29	0
1/11/22 17:30	10.26	139.7	8.15	50.95	29.29	0
1/11/22 17:45	8.76	135.5	8.33	50.91	29.29	0
1/11/22 18:00	7.356	134.8	8.53	50.97	29.29	0
1/11/22 18:15	6.676	129.9	8.42	51.14	29.29	0
1/11/22 18:30	7.36	126.8	7.524	51.6	29.3	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/11/22 18:45	7.443	129.2	10.25	51.86	29.29	0.01
1/11/22 19:00	7.322	131.9	9.26	51.77	29.28	0
1/11/22 19:15	7.108	137.6	7.575	51.65	29.28	0.01
1/11/22 19:30	6.936	129.5	7.321	51.24	29.27	0.01
1/11/22 19:45	7.691	140	6.433	50.97	29.27	0.02
1/11/22 20:00	7.726	141.7	7.486	51.25	29.27	0.01
1/11/22 20:15	7.039	168.8	12.38	50.52	29.27	0.02
1/11/22 20:30	5.942	170.8	10.22	49.87	29.28	0.01
1/11/22 20:45	4.153	166.9	11.66	49.53	29.28	0.01
1/11/22 21:00	4.655	155.2	16.03	49.3	29.28	0
1/11/22 21:15	3.579	144.9	14.35	49.25	29.28	0.01
1/11/22 21:30	4.268	152.3	15.01	49.5	29.3	0
1/11/22 21:45	1.625	90.6	26.71	49.62	29.3	0
1/11/22 22:00	2.686	105.2	53.6	49.9	29.31	0.01
1/11/22 22:15	4.147	150	41.07	50.5	29.31	0
1/11/22 22:30	4.522	132.7	25.31	50.48	29.31	0.01
1/11/22 22:45	6.565	134	9.66	50.22	29.31	0.02
1/11/22 23:00	7.092	128.2	6.666	50.19	29.31	0.01
1/11/22 23:15	6.698	134.5	9.1	50.22	29.31	0.01
1/11/22 23:30	7.2	138.7	10.22	50.34	29.32	0.04
1/11/22 23:45	6.842	150.6	17.53	50.49	29.32	0.04
1/12/22 0:00	7.124	147.5	11.02	50.57	29.33	0.04
1/12/22 0:15	8.43	146.9	8.11	50.6	29.33	0.03
1/12/22 0:30	8.76	147.1	7.238	50.6	29.32	0.01
1/12/22 0:45	9.82	150.4	7.437	50.72	29.32	0.01
1/12/22 1:00	8.17	144.8	8.41	50.76	29.32	0.01
1/12/22 1:15	7.374	140.9	8.59	50.8	29.32	0.01
1/12/22 1:30	7.7	143	8.5	50.88	29.33	0.01
1/12/22 1:45	7.809	139.7	7.579	50.94	29.33	0
1/12/22 2:00	8.73	148.9	7.949	51.07	29.34	0.02
1/12/22 2:15	8.27	144	6.821	51.16	29.34	0.02
1/12/22 2:30	9.05	144.2	7.14	51.29	29.34	0.02
1/12/22 2:45	9.05	148.5	8.34	51.4	29.34	0.01
1/12/22 3:00	6.459	136.4	8.13	51.38	29.34	0.01
1/12/22 3:15	6.365	132.8	7.712	51.44	29.34	0
1/12/22 3:30	7.318	138.1	8.33	51.53	29.33	0.01
1/12/22 3:45	8.48	138.3	8.25	51.67	29.33	0
1/12/22 4:00	8.47	145.7	8.52	51.96	29.33	0
1/12/22 4:15	8.34	146.2	6.706	51.94	29.33	0
1/12/22 4:30	7.837	145.2	6.205	51.83	29.32	0
1/12/22 4:45	6.424	133.3	8.4	51.86	29.32	0
1/12/22 5:00	5.818	128.6	7.182	51.98	29.32	0
1/12/22 5:15	7.109	140.3	8.01	52.13	29.32	0
1/12/22 5:30	7.507	142.2	6.131	52.19	29.32	0.01
1/12/22 5:45	7.206	138.5	7.239	52.15	29.32	0.01
1/12/22 6:00	6.308	133.6	8.73	52.14	29.32	0.02
1/12/22 6:15	5.747	129.2	8.48	52.12	29.31	0.01
1/12/22 6:30	5.999	129.4	7.572	52.2	29.31	0
1/12/22 6:45	6.457	140.6	8.96	52.42	29.31	0.01
1/12/22 7:00	6.355	136.2	8.93	52.47	29.31	0.01
1/12/22 7:15	6.145	137.3	9.03	52.54	29.31	0.01
1/12/22 7:30	5.202	131.1	7.065	52.61	29.31	0.01
1/12/22 7:45	5.454	134.8	6.433	52.75	29.31	0
1/12/22 8:00	6.697	132.7	7.223	52.81	29.31	0
1/12/22 8:15	7.314	130.4	8.36	53.15	29.3	0.01
1/12/22 8:30	5.589	130.7	8.7	53.43	29.3	0
1/12/22 8:45	5.308	128.1	9.91	53.7	29.3	0
1/12/22 9:00	6.112	137.4	8.92	54.19	29.3	0
1/12/22 9:15	5.296	140	6.357	54.57	29.3	0
1/12/22 9:30	5.167	138.9	8.89	54.75	29.3	0
1/12/22 9:45	5.12	168	16.74	55.38	29.3	0
1/12/22 10:00	5.255	188.4	12.13	55.16	29.31	0
1/12/22 10:15	5.932	164.5	14.45	54.87	29.32	0
1/12/22 10:30	7.425	170.8	9.85	55.25	29.32	0
1/12/22 10:45	5.383	159.4	12.99	54.94	29.32	0
1/12/22 11:00	2.838	135.7	19.22	54.75	29.31	0
1/12/22 11:15	6.428	193.2	31.24	55.65	29.3	0
1/12/22 11:30	5.844	201.5	13.39	56.1	29.3	0
1/12/22 11:45	6.205	234.3	18.43	56.16	29.3	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/12/22 12:00	5.913	231.6	38.6	56.35	29.3	0
1/12/22 12:15	3.101	106.4	53.85	55.81	29.3	0
1/12/22 12:30	4.139	199	40.02	56.31	29.29	0
1/12/22 12:45	2.329	124.6	28.37	56.85	29.29	0
1/12/22 13:00	2.463	114.7	25.4	56.64	29.29	0
1/12/22 13:15	2.918	85.4	16.71	56.63	29.28	0
1/12/22 13:30	4.191	74.76	11.29	56.87	29.27	0
1/12/22 13:45	4.746	90.4	9.31	55.77	29.26	0
1/12/22 14:00	3.449	123.4	21.09	56.95	29.26	0
1/12/22 14:15	2.886	107.3	53.83	57.62	29.27	0
1/12/22 14:30	2.068	71.77	44.07	56.94	29.25	0
1/12/22 14:45	2.005	161.1	59.49	56.09	29.26	0
1/12/22 15:00	3.142	221.3	20.59	55.74	29.27	0
1/12/22 15:15	3.105	224.5	26.66	56.16	29.27	0
1/12/22 15:30	0.781	50.74	61.61	54.81	29.27	0
1/12/22 15:45	2.244	330.1	34.5	55.04	29.27	0
1/12/22 16:00	3.109	329.4	22.61	55.2	29.26	0
1/12/22 16:15	2.753	332.9	27.76	55.06	29.26	0
1/12/22 16:30	2.683	21.52	19.84	54.5	29.26	0
1/12/22 16:45	2.825	41.94	7.586	53.33	29.25	0
1/12/22 17:00	1.422	66.67	46.06	52.92	29.25	0
1/12/22 17:15	2.865	192.5	10.66	53.07	29.25	0
1/12/22 17:30	1.891	162.8	21.44	52.02	29.25	0
1/12/22 17:45	0.954	259.5	41.69	51.41	29.25	0
1/12/22 18:00	1.002	173.1	65.14	50.79	29.25	0
1/12/22 18:15	1.92	201.3	18.92	50.32	29.24	0
1/12/22 18:30	1.526	67.97	11.68	49.88	29.24	0
1/12/22 18:45	2.197	187.4	54.3	49.73	29.24	0
1/12/22 19:00	1.192	160.2	9.67	49.69	29.25	0
1/12/22 19:15	1.07	35.58	17.52	48.4	29.25	0
1/12/22 19:30	2.034	87.7	24.34	48.85	29.24	0
1/12/22 19:45	2.153	70.72	24.65	48.11	29.24	0
1/12/22 20:00	2.23	74.44	9.03	47.77	29.24	0
1/12/22 20:15	4.37	154.3	30.23	48.25	29.24	0
1/12/22 20:30	5.463	182.1	10.77	47.17	29.24	0
1/12/22 20:45	3.503	172.1	20.67	46.44	29.24	0
1/12/22 21:00	1.524	152.5	40.78	45.8	29.24	0
1/12/22 21:15	1.707	43.89	16.82	45.9	29.24	0
1/12/22 21:30	3.672	152.1	18.24	45.15	29.24	0
1/12/22 21:45	3.878	117.7	20.49	46.3	29.24	0
1/12/22 22:00	6.226	135.1	17.02	46.46	29.23	0
1/12/22 22:15	8.4	135	11.36	46.69	29.23	0
1/12/22 22:30	7.745	135.2	21.08	48.01	29.22	0
1/12/22 22:45	7.323	166.8	29.48	45.86	29.23	0
1/12/22 23:00	5.257	117.8	18.43	46.83	29.22	0
1/12/22 23:15	2.54	132.3	73.66	45.69	29.22	0
1/12/22 23:30	4.058	204.4	31.36	47.08	29.22	0
1/12/22 23:45	6.613	184.5	29.43	47.12	29.22	0
1/13/22 0:00	3.779	130.6	31.78	46.54	29.22	0
1/13/22 0:15	3.179	166.9	75.42	45.14	29.22	0
1/13/22 0:30	2.715	174	38.78	45.94	29.23	0
1/13/22 0:45	1.618	141.2	67.28	46.12	29.23	0
1/13/22 1:00	4.285	106.9	5.966	45.3	29.22	0
1/13/22 1:15	2.911	134.3	15.4	46.25	29.22	0
1/13/22 1:30	4.856	172.6	11.99	46.05	29.22	0
1/13/22 1:45	6.19	184.2	9.66	45.09	29.24	0
1/13/22 2:00	5.902	177.8	19.23	44.94	29.26	0
1/13/22 2:15	6.407	106	18.67	44.85	29.26	0.02
1/13/22 2:30	7.941	82.5	16.91	44.83	29.23	0.02
1/13/22 2:45	4.704	94	25.98	48.69	29.23	0
1/13/22 3:00	4.391	131.2	49.4	45.08	29.23	0
1/13/22 3:15	5.073	57.4	8.31	46.2	29.22	0.01
1/13/22 3:30	5.48	81.1	11.19	44.94	29.22	0
1/13/22 3:45	4.394	45.49	16.18	44.81	29.21	0
1/13/22 4:00	2.881	30.01	12.62	44.56	29.2	0
1/13/22 4:15	4.863	28.99	12.73	44.44	29.19	0
1/13/22 4:30	4.935	32.29	9.57	44.28	29.19	0
1/13/22 4:45	2.814	87.1	30.28	44.85	29.18	0
1/13/22 5:00	4.36	102.9	20.75	46.55	29.18	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/13/22 5:15	5.973	126.6	16.43	48.07	29.17	0
1/13/22 5:30	6.539	152.8	15.21	48.54	29.18	0
1/13/22 5:45	7.909	156	14.63	49.42	29.18	0
1/13/22 6:00	6.949	177.9	26.38	49.48	29.19	0
1/13/22 6:15	9.82	201.7	13.43	47.94	29.21	0
1/13/22 6:30	7.014	172.3	17.99	46.53	29.23	0.03
1/13/22 6:45	1.739	85.4	22.73	45.44	29.25	0.03
1/13/22 7:00	4.142	86.6	15.83	45.15	29.25	0.03
1/13/22 7:15	5.826	90.5	15.67	45.17	29.26	0.02
1/13/22 7:30	4.891	104	9.98	45.45	29.26	0.02
1/13/22 7:45	3.329	105.2	12.86	46	29.26	0.01
1/13/22 8:00	2.97	87.7	14.29	47.15	29.27	0
1/13/22 8:15	1.639	156.5	57.67	46.97	29.28	0
1/13/22 8:30	5.451	189	17.47	47.09	29.29	0
1/13/22 8:45	5.263	201.4	14.23	46.67	29.3	0.01
1/13/22 9:00	4.852	196	28.4	46.93	29.3	0
1/13/22 9:15	2.054	105.9	22.32	46.38	29.31	0
1/13/22 9:30	2.234	93.2	10.68	46.2	29.32	0
1/13/22 9:45	2.589	100.1	19.15	46.56	29.32	0.01
1/13/22 10:00	3.792	133.5	7.721	46.85	29.32	0
1/13/22 10:15	4.13	128.9	11.4	47.31	29.33	0
1/13/22 10:30	3.728	124.3	6.085	47.6	29.34	0
1/13/22 10:45	3.264	127.8	9.45	47.79	29.34	0
1/13/22 11:00	3.531	147	9.2	48.02	29.34	0
1/13/22 11:15	4.381	164.5	17.56	48.29	29.34	0
1/13/22 11:30	6.193	145.3	10.69	49.7	29.32	0
1/13/22 11:45	3.481	116.1	62.27	50.97	29.33	0
1/13/22 12:00	1.995	341.4	60.22	51.39	29.34	0
1/13/22 12:15	1.709	326.4	81.2	51.93	29.35	0
1/13/22 12:30	1.868	260.3	50.39	52.45	29.35	0
1/13/22 12:45	2.36	338.4	27.94	52.9	29.36	0
1/13/22 13:00	4.215	326	20.48	51.85	29.37	0
1/13/22 13:15	4.867	326.7	8.41	51.74	29.38	0
1/13/22 13:30	5.421	333	12.74	52.04	29.38	0
1/13/22 13:45	5.716	359.2	24.41	51.61	29.38	0
1/13/22 14:00	4.789	23.68	12.82	50.12	29.38	0
1/13/22 14:15	2.664	7.092	18.22	50.78	29.39	0
1/13/22 14:30	3.279	22.25	12.09	51.4	29.39	0
1/13/22 14:45	4.342	25.14	10.25	51.13	29.4	0
1/13/22 15:00	4.556	31.33	10.06	50.82	29.41	0
1/13/22 15:15	4.055	23.83	7.748	50.58	29.42	0
1/13/22 15:30	2.385	18.71	17.59	50.3	29.42	0
1/13/22 15:45	1.249	10.37	42.9	50.3	29.42	0
1/13/22 16:00	4.547	287.3	8.8	50	29.43	0
1/13/22 16:15	4.947	320.2	4.341	48.85	29.44	0
1/13/22 16:30	5.495	313.3	2.931	48.88	29.45	0
1/13/22 16:45	5.097	316.8	1.9	49.27	29.46	0
1/13/22 17:00	5.687	326.2	4.826	48.71	29.48	0
1/13/22 17:15	7.359	314.3	7.319	47.8	29.5	0
1/13/22 17:30	6.762	312.7	8.77	48.65	29.51	0
1/13/22 17:45	4.695	332.3	4.569	48.55	29.52	0
1/13/22 18:00	1.267	10.24	31.41	48.71	29.52	0
1/13/22 18:15	1.781	17.97	11.94	48.72	29.52	0
1/13/22 18:30	1.426	301.3	77.29	48.52	29.53	0
1/13/22 18:45	2.861	191.1	1.86	48.1	29.52	0
1/13/22 19:00	2.684	192.6	2.454	48.1	29.52	0
1/13/22 19:15	0.741	177.1	8.87	47.11	29.52	0
1/13/22 19:30	4.336	125.7	21.38	46.36	29.51	0
1/13/22 19:45	5.835	112.7	7.272	46.33	29.51	0
1/13/22 20:00	5.137	105.5	7.35	46.32	29.51	0
1/13/22 20:15	5.158	114.1	5.478	45.94	29.5	0
1/13/22 20:30	5.341	113.5	6.441	46.52	29.5	0
1/13/22 20:45	2.42	88	29.19	45.66	29.5	0
1/13/22 21:00	2.931	33.97	17.5	44.66	29.5	0
1/13/22 21:15	4.162	6.392	12	44.49	29.5	0
1/13/22 21:30	4.728	2.652	12.16	44.12	29.51	0
1/13/22 21:45	3.344	4.312	18.59	43.94	29.52	0
1/13/22 22:00	3.108	4.318	12.18	43.45	29.53	0
1/13/22 22:15	4.887	329.2	5.106	42.67	29.54	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/13/22 22:30	1.588	13.2	28.46	42.12	29.55	0
1/13/22 22:45	2.101	183	49.47	41.42	29.56	0
1/13/22 23:00	2.831	123.9	27.78	40.51	29.57	0
1/13/22 23:15	3.465	116	14.78	40.94	29.58	0
1/13/22 23:30	6.603	150.5	7.173	41.21	29.59	0
1/13/22 23:45	4.977	149.9	7.327	40.77	29.6	0
1/14/22 0:00	4.748	163.2	17.06	40.79	29.61	0
1/14/22 0:15	4.926	128.5	13.49	41.3	29.62	0
1/14/22 0:30	4.58	121.9	7.195	41.66	29.62	0
1/14/22 0:45	4.614	130.5	7.304	42.35	29.62	0
1/14/22 1:00	4.618	137	5.401	43.11	29.62	0.01
1/14/22 1:15	4.376	133.2	6.601	43.63	29.62	0
1/14/22 1:30	2.886	117.6	5.15	42.98	29.63	0
1/14/22 1:45	3.95	131.9	8.34	43.19	29.63	0
1/14/22 2:00	4.111	144.2	5.182	43.74	29.63	0
1/14/22 2:15	4.818	138	8.56	43.91	29.64	0
1/14/22 2:30	3.809	115.8	21.5	44.31	29.64	0
1/14/22 2:45	2.146	97.9	5.634	42.68	29.65	0
1/14/22 3:00	3.435	129.8	10.22	43.66	29.65	0
1/14/22 3:15	4.13	130.6	6.898	45.12	29.65	0
1/14/22 3:30	4.476	98.2	17.59	44.53	29.65	0
1/14/22 3:45	4.876	90.4	7.953	43.39	29.65	0
1/14/22 4:00	3.957	137.3	26.43	43.55	29.64	0
1/14/22 4:15	3.701	166.6	14.05	43.67	29.64	0
1/14/22 4:30	3.132	151.3	9.45	43.87	29.64	0
1/14/22 4:45	1.959	87.6	16.69	43.61	29.64	0
1/14/22 5:00	0.96	67.73	9.39	42.37	29.64	0
1/14/22 5:15	0.464	173	37.37	42.09	29.65	0
1/14/22 5:30	1.545	290.4	32.68	41.99	29.65	0
1/14/22 5:45	3.832	311.7	5.519	41.81	29.64	0
1/14/22 6:00	4.045	305.6	2.621	41.3	29.65	0
1/14/22 6:15	6.662	305.8	2.985	41.44	29.65	0
1/14/22 6:30	3.602	282.9	14.25	41.37	29.65	0
1/14/22 6:45	2.743	276.9	11.28	41.34	29.65	0
1/14/22 7:00	2.817	224.7	45.92	41.33	29.65	0
1/14/22 7:15	3.294	135.1	11.27	40.54	29.64	0
1/14/22 7:30	3.963	121.4	5.019	40.67	29.64	0
1/14/22 7:45	4.707	125.3	5.179	41.06	29.64	0
1/14/22 8:00	6.012	131.5	10.34	41.34	29.63	0
1/14/22 8:15	6.127	184.2	19.94	41.01	29.64	0
1/14/22 8:30	5.407	153.5	22.37	40.58	29.64	0
1/14/22 8:45	1.973	258.9	83.8	40.35	29.64	0
1/14/22 9:00	4.66	229.1	36.17	41.11	29.64	0
1/14/22 9:15	3.617	174	24.66	41.6	29.64	0
1/14/22 9:30	3.424	109.4	7.224	40.91	29.64	0
1/14/22 9:45	3.64	139.7	17.35	40.94	29.64	0
1/14/22 10:00	3.946	159.2	4.496	42.35	29.64	0
1/14/22 10:15	4.577	158.2	6.901	42.7	29.64	0
1/14/22 10:30	3.222	161.3	8.86	42.45	29.64	0
1/14/22 10:45	3.478	158.8	11.82	43.16	29.64	0
1/14/22 11:00	1.032	14.11	50.98	43.66	29.65	0
1/14/22 11:15	2.476	357.8	22.65	43.41	29.64	0
1/14/22 11:30	4.012	277.3	42.44	43.6	29.64	0
1/14/22 11:45	4.939	252.1	10.51	43.55	29.64	0
1/14/22 12:00	2.828	212.2	31.32	44.12	29.63	0
1/14/22 12:15	2.911	189	20.93	44.75	29.63	0
1/14/22 12:30	3.35	129.7	12.06	46.16	29.62	0
1/14/22 12:45	4.251	193.2	32.06	47.14	29.61	0
1/14/22 13:00	3.94	217	8.32	46.46	29.61	0
1/14/22 13:15	4.09	230.1	17.82	46.64	29.6	0
1/14/22 13:30	2.646	257.7	19.66	46.94	29.6	0
1/14/22 13:45	1.973	96.6	51.61	48.35	29.59	0
1/14/22 14:00	2.371	105.5	26.75	48.51	29.58	0
1/14/22 14:15	2.297	104.7	28.51	49.07	29.58	0
1/14/22 14:30	2.885	147.3	24.12	49.94	29.57	0
1/14/22 14:45	3.334	243.2	38.65	50.5	29.57	0
1/14/22 15:00	5.808	307.9	10.41	49.96	29.57	0
1/14/22 15:15	5.313	320.1	5.51	49	29.58	0
1/14/22 15:30	5.252	318.2	5.018	48.89	29.58	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/14/22 15:45	3.52	354.6	22.07	48.03	29.58	0
1/14/22 16:00	2.918	3.487	12.49	47.38	29.58	0
1/14/22 16:15	2.85	42.64	19.02	47.03	29.58	0
1/14/22 16:30	3.354	20.08	11.17	46.04	29.58	0
1/14/22 16:45	4.632	37.92	9.1	45.57	29.58	0
1/14/22 17:00	3.923	19.2	8.94	45.7	29.57	0
1/14/22 17:15	3.052	11.38	9.65	45.73	29.57	0
1/14/22 17:30	1.86	18.28	46.66	45.72	29.56	0
1/14/22 17:45	1.227	31.3	39.48	45.78	29.56	0
1/14/22 18:00	0.882	239.8	84.1	45.86	29.55	0
1/14/22 18:15	0.228	81.9	23.4	45.69	29.55	0
1/14/22 18:30	1.084	268.9	36.17	45.73	29.55	0
1/14/22 18:45	2.92	273.2	41.1	45.32	29.55	0
1/14/22 19:00	2.883	245.4	18.15	45.15	29.55	0
1/14/22 19:15	2.57	264.4	16.16	44.67	29.55	0
1/14/22 19:30	2.485	214.1	17.71	44.67	29.54	0
1/14/22 19:45	1.064	207.3	14.26	45	29.54	0
1/14/22 20:00	1.434	204.8	14.19	44.65	29.54	0
1/14/22 20:15	2.183	219.4	29.82	43.79	29.54	0
1/14/22 20:30	0.709	92.4	28.91	43.68	29.53	0
1/14/22 20:45	0.903	16.87	41.06	42.84	29.53	0
1/14/22 21:00	1.821	88.2	23.04	42.95	29.53	0
1/14/22 21:15	2.964	89.3	9.36	42.95	29.53	0
1/14/22 21:30	3.303	105.8	9.24	43.53	29.52	0
1/14/22 21:45	6.374	108.3	8.48	43.92	29.52	0
1/14/22 22:00	5.323	96.1	7.473	42.97	29.53	0
1/14/22 22:15	5.623	99.1	8.44	42	29.52	0
1/14/22 22:30	5.822	109	9.07	42.49	29.52	0
1/14/22 22:45	6.409	117.9	8.55	43.37	29.52	0
1/14/22 23:00	6.206	119.7	7.69	43.84	29.52	0
1/14/22 23:15	7.466	135.7	6.625	43.99	29.52	0
1/14/22 23:30	5.729	130.2	7.205	43.76	29.52	0
1/14/22 23:45	2.304	289.5	70.51	42.96	29.52	0
1/15/22 0:00	0.613	243.8	24.96	42.83	29.52	0
1/15/22 0:15	2.085	11.07	18.34	41.18	29.52	0
1/15/22 0:30	4.357	13.83	6.205	39.82	29.52	0
1/15/22 0:45	4.769	15.96	10.91	40.05	29.52	0
1/15/22 1:00	2.662	17.07	8.89	39.75	29.51	0
1/15/22 1:15	3.705	352.3	31.04	39.53	29.52	0
1/15/22 1:30	2.978	294.8	36.29	39.99	29.52	0
1/15/22 1:45	5.264	295	4.733	39.84	29.53	0
1/15/22 2:00	2.287	293.3	17.38	41.25	29.53	0
1/15/22 2:15	1.484	93.1	28.63	40.23	29.53	0
1/15/22 2:30	1.898	149	26.97	40	29.53	0
1/15/22 2:45	2.289	160	10.98	39.33	29.53	0
1/15/22 3:00	1.792	352.1	81.9	40.25	29.54	0
1/15/22 3:15	2.242	41.94	10.71	39.68	29.53	0
1/15/22 3:30	0.634	46.27	17.48	39.88	29.53	0
1/15/22 3:45	1.213	236.9	46.62	40.22	29.53	0
1/15/22 4:00	2.032	91.6	13.33	39.41	29.53	0
1/15/22 4:15	3.854	126.7	9.78	38.15	29.51	0
1/15/22 4:30	4.532	137.1	16.13	39.2	29.52	0
1/15/22 4:45	6.264	137.8	11.92	41.24	29.53	0
1/15/22 5:00	5.27	112.1	12.61	41.37	29.5	0
1/15/22 5:15	4.082	155.2	27.79	41.08	29.5	0
1/15/22 5:30	2.628	89.2	40.38	40.67	29.49	0
1/15/22 5:45	3.121	6.653	18.82	39.04	29.48	0
1/15/22 6:00	5.023	281.4	11.61	39.33	29.49	0
1/15/22 6:15	3.428	290.6	50	40.12	29.49	0
1/15/22 6:30	0.897	61.21	62.99	39.75	29.49	0
1/15/22 6:45	3.038	236.3	7.564	40.91	29.49	0
1/15/22 7:00	4.117	219	5.731	40.93	29.5	0
1/15/22 7:15	2.31	128.6	51.08	40.87	29.5	0
1/15/22 7:30	2.291	106.1	9.45	40.01	29.5	0
1/15/22 7:45	1.24	107.4	29.67	40.54	29.5	0
1/15/22 8:00	2.307	36.27	7.142	39.21	29.51	0
1/15/22 8:15	2.8	25.27	4.742	38.34	29.51	0
1/15/22 8:30	4.023	12.54	15.36	38.27	29.52	0
1/15/22 8:45	2.778	12.37	9.51	38.82	29.52	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/15/22 9:00	1.648	18.23	3.928	39.12	29.52	0
1/15/22 9:15	1.106	0.07	10.29	39.76	29.52	0
1/15/22 9:30	0.427	136.6	33.72	40.4	29.52	0
1/15/22 9:45	1.325	59.19	20.46	40.31	29.53	0
1/15/22 10:00	3.084	18.56	4.696	39.61	29.53	0
1/15/22 10:15	2.498	16.03	9.42	40.4	29.53	0
1/15/22 10:30	2.397	15.18	6.988	41.61	29.53	0
1/15/22 10:45	1.615	39.81	17.73	42.44	29.53	0
1/15/22 11:00	0.583	81	32.24	43.94	29.53	0
1/15/22 11:15	3.275	211.2	21.77	44.34	29.53	0
1/15/22 11:30	2.586	243.8	10.99	44.68	29.53	0
1/15/22 11:45	1.759	218.5	24.66	45.55	29.52	0
1/15/22 12:00	0.909	189.2	38.71	47.26	29.52	0
1/15/22 12:15	2.504	193.4	15.37	46.87	29.51	0
1/15/22 12:30	2.755	237.9	22.37	47.22	29.5	0
1/15/22 12:45	1.562	278.9	22.42	47.61	29.5	0
1/15/22 13:00	2.702	290.8	20.15	48.03	29.5	0
1/15/22 13:15	3.739	285.2	15.39	47.73	29.5	0
1/15/22 13:30	4.726	304.6	12.24	47.71	29.5	0
1/15/22 13:45	3.78	308.1	20.48	47.31	29.5	0
1/15/22 14:00	4.389	260.1	8.95	46.28	29.49	0
1/15/22 14:15	4.885	271.9	6.228	45.5	29.49	0
1/15/22 14:30	4.478	277.8	7.458	45.37	29.49	0
1/15/22 14:45	3.184	292	7.872	45.54	29.48	0
1/15/22 15:00	2.004	337	20.67	45.5	29.48	0
1/15/22 15:15	1.643	359.5	17.66	45.63	29.48	0
1/15/22 15:30	3.368	273.1	20.94	44.64	29.48	0
1/15/22 15:45	4.371	269.7	6.88	43.26	29.48	0
1/15/22 16:00	7.137	270.9	4.961	40.66	29.48	0
1/15/22 16:15	6.123	274.7	4.317	40.27	29.49	0
1/15/22 16:30	4.904	282	6.409	40.09	29.49	0
1/15/22 16:45	4.815	286.6	7.785	40.03	29.49	0
1/15/22 17:00	3.398	278.3	12.77	40.01	29.49	0
1/15/22 17:15	2.014	257.2	17.13	40.07	29.49	0
1/15/22 17:30	0.947	345.6	56.85	40.14	29.5	0
1/15/22 17:45	2.127	59.71	21.65	40.32	29.49	0
1/15/22 18:00	0.876	16.25	11.14	40.36	29.49	0
1/15/22 18:15	0.178	103.8	17.87	40.16	29.49	0
1/15/22 18:30	0.04	0.052	0.009	40.08	29.49	0
1/15/22 18:45	0.974	167.2	42.78	40.09	29.49	0
1/15/22 19:00	2.098	133.3	10.12	39.85	29.49	0
1/15/22 19:15	0.355	323.1	19.15	39.85	29.5	0
1/15/22 19:30	1.865	329.1	12.8	39.95	29.5	0
1/15/22 19:45	3.614	342.1	11.65	39.78	29.5	0
1/15/22 20:00	3.838	344.9	10.62	39.44	29.5	0
1/15/22 20:15	3.135	15.53	14.68	39.47	29.5	0
1/15/22 20:30	1.826	297.3	57.05	39.46	29.5	0
1/15/22 20:45	2.928	226.3	21.18	39.55	29.5	0
1/15/22 21:00	1.034	66.73	49.47	39.61	29.5	0
1/15/22 21:15	1.22	334.2	42.7	39.54	29.5	0
1/15/22 21:30	1.24	349.8	16.38	39.45	29.5	0
1/15/22 21:45	1.937	340.8	16.6	39.45	29.5	0
1/15/22 22:00	1.691	316.5	44.2	39.37	29.5	0
1/15/22 22:15	1.795	28.77	19.85	39.42	29.49	0
1/15/22 22:30	3.601	17.03	18.92	39.41	29.49	0
1/15/22 22:45	3.428	12.14	16.81	39.37	29.49	0
1/15/22 23:00	2.447	357.4	16.93	39.23	29.49	0
1/15/22 23:15	3.706	33.37	19.78	39.11	29.49	0
1/15/22 23:30	2.625	71.87	24	39.05	29.48	0
1/15/22 23:45	1.055	63.74	13.47	38.98	29.48	0
1/16/22 0:00	0.792	85.1	21.88	38.95	29.49	0
1/16/22 0:15	1.093	241.2	14.91	39	29.47	0
1/16/22 0:30	2.114	262.3	57.99	38.97	29.46	0
1/16/22 0:45	2.048	75.14	21.71	38.77	29.47	0
1/16/22 1:00	1.125	32.98	19.59	38.7	29.46	0
1/16/22 1:15	1.875	39.62	19.8	38.47	29.46	0
1/16/22 1:30	2.358	63.15	6.89	37.89	29.46	0
1/16/22 1:45	2.533	35.15	28.07	37.71	29.47	0
1/16/22 2:00	1.77	7.296	17.78	38.02	29.48	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/16/22 2:15	2.303	306.9	15.33	38.15	29.47	0
1/16/22 2:30	1.685	336.9	17.89	38.09	29.46	0
1/16/22 2:45	2.607	294.3	33.48	37.95	29.46	0
1/16/22 3:00	1.018	301.7	20.01	37.88	29.46	0
1/16/22 3:15	1.105	248.7	41.4	37.97	29.46	0
1/16/22 3:30	1.91	242.8	32.3	38.04	29.45	0
1/16/22 3:45	2.169	277.3	29.63	37.92	29.45	0
1/16/22 4:00	2.741	284.8	11.52	37.82	29.45	0
1/16/22 4:15	2.414	315.6	31.31	37.84	29.45	0
1/16/22 4:30	3.283	0.577	14.62	37.67	29.44	0
1/16/22 4:45	2.482	29.22	32.27	37.62	29.44	0
1/16/22 5:00	2.123	35.24	27.07	37.53	29.43	0
1/16/22 5:15	3.902	14.71	24.05	37.42	29.44	0
1/16/22 5:30	2.77	36.28	14.17	37.21	29.44	0
1/16/22 5:45	1.535	51.66	9.78	37.09	29.43	0
1/16/22 6:00	0.399	41.49	5.308	37	29.43	0
1/16/22 6:15	0.335	229.7	43.13	37	29.43	0
1/16/22 6:30	0.274	100.2	9.88	36.98	29.43	0
1/16/22 6:45	1.022	76.13	6.009	36.91	29.43	0
1/16/22 7:00	1.261	197	12.76	36.84	29.43	0
1/16/22 7:15	2.665	224.4	9.71	36.24	29.43	0
1/16/22 7:30	0.743	258.4	40.25	36.3	29.43	0
1/16/22 7:45	2.774	152.1	8.55	35.92	29.43	0
1/16/22 8:00	2.452	136.9	8.55	35.72	29.42	0
1/16/22 8:15	2.383	144	12.07	35.94	29.41	0
1/16/22 8:30	2.65	128.3	14.42	35.82	29.41	0
1/16/22 8:45	2.139	83.6	19.99	35.77	29.4	0
1/16/22 9:00	1.662	196.8	55.71	35.66	29.4	0
1/16/22 9:15	2.737	255.3	29.42	35.92	29.41	0
1/16/22 9:30	1.54	310.4	27.43	36.25	29.41	0
1/16/22 9:45	3.115	325.9	14.27	36.36	29.41	0
1/16/22 10:00	2.288	2.184	18.88	36.25	29.41	0
1/16/22 10:15	0.7	22.68	20.63	36.15	29.41	0
1/16/22 10:30	1.719	146.1	37.77	36.34	29.4	0
1/16/22 10:45	2.202	138.6	11.15	36.57	29.4	0
1/16/22 11:00	3.224	169.5	36.62	36.35	29.4	0
1/16/22 11:15	4.802	153.8	21.81	36.82	29.39	0
1/16/22 11:30	4.057	172.8	37.38	36.54	29.39	0
1/16/22 11:45	2.881	205.6	16.93	36.66	29.39	0
1/16/22 12:00	0.978	180.3	42.85	37.09	29.39	0
1/16/22 12:15	1.17	39.72	18.92	37.47	29.38	0
1/16/22 12:30	1.411	187.4	62.65	37.83	29.38	0
1/16/22 12:45	3.306	278.4	23.96	39.02	29.37	0
1/16/22 13:00	4.333	283.4	13.28	38.98	29.37	0
1/16/22 13:15	3.795	287.2	12.28	39.05	29.37	0
1/16/22 13:30	2.364	284.9	46.14	39.2	29.36	0
1/16/22 13:45	2.367	65.56	11.82	39.17	29.35	0
1/16/22 14:00	2.063	101.9	23.95	39.57	29.34	0
1/16/22 14:15	2.508	128	15.42	39.9	29.33	0
1/16/22 14:30	2.07	157.4	19.29	40.47	29.33	0
1/16/22 14:45	2.303	187.1	48.52	40.62	29.33	0
1/16/22 15:00	2.884	212.4	18.59	40.71	29.32	0
1/16/22 15:15	3.717	210.8	11.25	40.84	29.32	0
1/16/22 15:30	2.671	228.5	16.19	41.14	29.33	0
1/16/22 15:45	1.79	193.2	36.33	41.32	29.31	0
1/16/22 16:00	2.286	212	21.75	41.29	29.31	0
1/16/22 16:15	2.548	256.4	32.26	41.73	29.32	0
1/16/22 16:30	3.206	313.5	8.28	41.59	29.32	0
1/16/22 16:45	3.156	359.3	23.61	40.75	29.32	0
1/16/22 17:00	2.781	13.84	7.743	39.47	29.33	0
1/16/22 17:15	3.438	11.21	11.42	39.2	29.33	0
1/16/22 17:30	3.215	19.59	11	39.29	29.33	0
1/16/22 17:45	4.291	36.9	19.82	38.88	29.32	0
1/16/22 18:00	4.692	19.81	10.59	38.48	29.31	0
1/16/22 18:15	5.281	33.81	8.86	38.5	29.31	0
1/16/22 18:30	3.336	14.91	16.43	38.38	29.3	0
1/16/22 18:45	3.104	353.4	15.7	38.21	29.29	0
1/16/22 19:00	2.088	330.5	13	38.1	29.29	0
1/16/22 19:15	2.804	287	12.81	38.22	29.29	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/16/22 19:30	3.941	300.1	10.31	38.24	29.3	0
1/16/22 19:45	3.217	338.1	13.96	38.11	29.3	0
1/16/22 20:00	2.251	318.6	14.93	37.94	29.29	0
1/16/22 20:15	0.682	14.21	13.55	37.8	29.3	0
1/16/22 20:30	0.472	57.69	5.857	37.75	29.29	0
1/16/22 20:45	1.327	68.83	20.03	37.7	29.29	0
1/16/22 21:00	1.404	95.7	18.43	37.66	29.29	0
1/16/22 21:15	0.931	56.57	9.8	37.6	29.29	0
1/16/22 21:30	0.785	84.5	12.01	37.59	29.28	0
1/16/22 21:45	1.077	71.99	10.9	37.62	29.28	0
1/16/22 22:00	0.992	175.8	11.28	37.6	29.28	0
1/16/22 22:15	1.05	118.9	37.48	37.5	29.28	0
1/16/22 22:30	1.289	16.13	12.8	37.27	29.28	0
1/16/22 22:45	0.998	47.66	11.38	37.17	29.28	0
1/16/22 23:00	0.45	47.59	10.51	37.13	29.28	0
1/16/22 23:15	1.741	1.782	11.48	37.19	29.28	0
1/16/22 23:30	2.964	54.33	19.28	36.95	29.28	0
1/16/22 23:45	2.295	70.26	23.14	36.64	29.27	0
1/17/22 0:00	4.146	122.1	7.322	36.4	29.26	0
1/17/22 0:15	4.256	143.4	16.99	36.11	29.25	0
1/17/22 0:30	3.9	166.4	7.365	36.12	29.25	0
1/17/22 0:45	2.855	149.5	10.47	35.86	29.25	0
1/17/22 1:00	2.495	118.9	10.95	35.47	29.24	0
1/17/22 1:15	1.651	114.8	17.37	35.35	29.24	0
1/17/22 1:30	1.992	136.4	43.21	35.28	29.23	0
1/17/22 1:45	2.049	318.2	70.73	35.26	29.23	0
1/17/22 2:00	2.339	5.822	52.27	35.28	29.22	0
1/17/22 2:15	4.467	339.3	17	35.4	29.22	0
1/17/22 2:30	3.971	23.01	13.76	35.45	29.22	0
1/17/22 2:45	3.211	11.75	13.55	35.75	29.22	0
1/17/22 3:00	1.949	13.92	9.56	35.87	29.22	0
1/17/22 3:15	2.083	56.41	15.75	35.79	29.21	0
1/17/22 3:30	1.658	29.01	35.27	35.94	29.21	0
1/17/22 3:45	2.067	11.64	21.3	36.21	29.21	0
1/17/22 4:00	3.057	32.69	13.45	35.96	29.21	0
1/17/22 4:15	2.273	31.99	20.99	35.82	29.2	0
1/17/22 4:30	2.021	62.94	10.54	35.81	29.2	0
1/17/22 4:45	2.899	131.6	77.16	35.94	29.19	0
1/17/22 5:00	2.17	158.9	74.28	35.46	29.19	0
1/17/22 5:15	5.495	263	21.34	35.87	29.2	0
1/17/22 5:30	1.886	8.96	51.18	35.31	29.2	0
1/17/22 5:45	2.043	204.4	19.53	35.55	29.2	0
1/17/22 6:00	2.21	163.1	13.74	35.53	29.2	0
1/17/22 6:15	3.904	188.4	11.08	35.71	29.2	0
1/17/22 6:30	2.229	130.4	58.14	35.47	29.2	0.01
1/17/22 6:45	2.136	60.3	61.56	35.44	29.2	0
1/17/22 7:00	3.49	140.4	15.07	35.52	29.2	0
1/17/22 7:15	2.967	152.5	21.26	35.47	29.19	0
1/17/22 7:30	5.985	228.7	27.44	35.43	29.2	0
1/17/22 7:45	2.776	308.9	67.45	35.03	29.21	0
1/17/22 8:00	2.426	347.7	53.02	35.32	29.21	0
1/17/22 8:15	3.912	99.1	26.94	35.54	29.2	0
1/17/22 8:30	6.151	162.6	16.31	36.23	29.2	0
1/17/22 8:45	7.012	186.2	16.96	36.17	29.21	0
1/17/22 9:00	5.136	186.4	20.47	36.51	29.21	0
1/17/22 9:15	2.861	254.1	37.58	37.47	29.22	0
1/17/22 9:30	5.658	231.6	17.95	38.33	29.22	0
1/17/22 9:45	2.8	246.1	39.04	39.18	29.23	0
1/17/22 10:00	2.414	25.61	36.46	39.7	29.23	0
1/17/22 10:15	3.177	112	15.2	39.92	29.22	0
1/17/22 10:30	3.694	184.6	18.74	40.38	29.22	0
1/17/22 10:45	1.359	167.2	33.76	40.75	29.23	0
1/17/22 11:00	0.95	90.3	21.82	41.61	29.23	0
1/17/22 11:15	1.308	172.5	31.99	42.2	29.22	0
1/17/22 11:30	2.892	187.3	8.97	42.56	29.22	0
1/17/22 11:45	2.487	181	11.69	43.11	29.21	0
1/17/22 12:00	3.022	168.1	12.7	43.46	29.21	0
1/17/22 12:15	3.799	144.8	9.83	44.99	29.22	0
1/17/22 12:30	3.387	129.3	11.39	45.76	29.2	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/17/22 12:45	3.913	137.8	10.12	46.58	29.2	0
1/17/22 13:00	4.941	158.1	15.06	47.33	29.19	0
1/17/22 13:15	5.347	167.7	14.52	47.84	29.19	0
1/17/22 13:30	4.671	136.8	13.7	48.01	29.19	0
1/17/22 13:45	5.871	137.1	15.89	48.48	29.19	0
1/17/22 14:00	7.275	176.3	10.03	48.51	29.18	0
1/17/22 14:15	7.577	173.4	13.32	47.99	29.18	0
1/17/22 14:30	7.221	175.4	8.4	47.78	29.18	0
1/17/22 14:45	6.068	180.1	12.92	48.01	29.18	0
1/17/22 15:00	4.218	185	11.21	48.6	29.18	0
1/17/22 15:15	4.854	185.7	8.96	48.71	29.18	0
1/17/22 15:30	5.902	159.5	13.92	48.41	29.17	0
1/17/22 15:45	6.539	144.9	7.766	48.11	29.17	0
1/17/22 16:00	4.863	155.8	14.65	48.11	29.17	0
1/17/22 16:15	5.094	175.4	10	48.48	29.17	0
1/17/22 16:30	4.269	155.7	18.3	48.17	29.16	0
1/17/22 16:45	3.48	166.1	13.07	48.41	29.17	0
1/17/22 17:00	2.423	133.8	11.92	48.39	29.17	0
1/17/22 17:15	3.04	128.5	11.05	48.49	29.17	0
1/17/22 17:30	4.148	147.8	15.02	48.64	29.17	0
1/17/22 17:45	6.251	149.9	12.03	48.38	29.17	0
1/17/22 18:00	6.268	149.5	9.16	48.4	29.17	0
1/17/22 18:15	6.445	150.9	8.73	48.19	29.17	0
1/17/22 18:30	6.71	154	12.13	48.42	29.17	0
1/17/22 18:45	8.3	164.3	21.66	47.9	29.17	0
1/17/22 19:00	11.33	164.6	10.9	45.93	29.17	0
1/17/22 19:15	7.913	135.8	13.4	45.18	29.17	0
1/17/22 19:30	6.168	139.4	21.52	44.9	29.18	0
1/17/22 19:45	4.281	109.1	11.01	44.37	29.18	0
1/17/22 20:00	5.289	116.8	8.87	44.1	29.18	0
1/17/22 20:15	6.088	131	12.84	44.23	29.18	0
1/17/22 20:30	7.955	135.8	7.425	43.77	29.18	0
1/17/22 20:45	6.892	123.9	6.027	43.38	29.18	0.01
1/17/22 21:00	8.32	123.6	6.805	43.24	29.18	0.01
1/17/22 21:15	8.24	128.5	7.669	43.14	29.18	0.01
1/17/22 21:30	9.21	133.1	7.479	43.01	29.18	0.01
1/17/22 21:45	8.96	135.6	7.721	43.04	29.18	0.01
1/17/22 22:00	8.98	137.2	7.564	43.08	29.18	0.01
1/17/22 22:15	9.5	141.6	6.692	42.98	29.18	0.02
1/17/22 22:30	8.39	136.1	10.49	43.04	29.18	0.02
1/17/22 22:45	8.88	136.5	9.37	43.08	29.18	0.02
1/17/22 23:00	8.11	131.6	10.83	43.08	29.18	0.01
1/17/22 23:15	6.432	119.5	8.28	43.05	29.18	0.03
1/17/22 23:30	6.199	114.6	9.97	43.01	29.18	0.02
1/17/22 23:45	6.999	111.7	8.13	42.99	29.18	0.01
1/18/22 0:00	5.896	124.8	12.47	43.04	29.18	0.01
1/18/22 0:15	6.646	142.5	8.97	43.07	29.18	0.01
1/18/22 0:30	7.577	136.8	6.052	43.08	29.18	0
1/18/22 0:45	6.189	130.9	7.278	43.12	29.17	0.01
1/18/22 1:00	6.36	129.6	8.51	43.2	29.18	0
1/18/22 1:15	6.376	131.4	8.04	43.24	29.18	0
1/18/22 1:30	6.276	124.1	9.36	43.28	29.18	0.01
1/18/22 1:45	6.113	131.3	11.44	43.32	29.18	0
1/18/22 2:00	7.342	132.1	7.116	43.4	29.19	0.01
1/18/22 2:15	6.711	129.2	10.07	43.54	29.19	0
1/18/22 2:30	6.806	130.7	8.89	43.65	29.19	0
1/18/22 2:45	6.655	130.1	9.54	43.7	29.19	0
1/18/22 3:00	6.41	137.8	9.35	43.76	29.19	0.01
1/18/22 3:15	7.852	149.9	10.5	43.86	29.19	0
1/18/22 3:30	8.26	160	9.85	43.94	29.19	0
1/18/22 3:45	8.24	163.5	11.56	43.96	29.19	0
1/18/22 4:00	8.48	173.9	9.47	43.98	29.19	0
1/18/22 4:15	9.54	174.7	10.01	44.05	29.19	0
1/18/22 4:30	8.52	176.6	9.69	44.13	29.2	0
1/18/22 4:45	9	168.9	9.36	44.23	29.2	0
1/18/22 5:00	9.7	170	8.9	44.36	29.21	0
1/18/22 5:15	9.47	177.4	9.16	44.48	29.21	0
1/18/22 5:30	9.85	172.8	9.35	44.56	29.21	0
1/18/22 5:45	8.91	180.6	8.68	44.52	29.22	0

Date/Time	Wind Speed (Average) Miles per Hour	Wind Direction Degrees	Sigma Theta Degrees	Temperature (Average) ° C	Barometric Pressure inches-Hg	Precipitation inches
1/18/22 6:00	9.45	179.5	10.84	44.53	29.22	0
1/18/22 6:15	9.07	175.2	8.29	44.51	29.22	0
1/18/22 6:30	10.28	181.3	9.2	44.49	29.23	0
1/18/22 6:45	9.19	178.4	9.26	44.31	29.23	0
1/18/22 7:00	8.39	186.7	9.29	44.15	29.24	0
1/18/22 7:15	8.85	194.5	9.97	43.97	29.24	0
1/18/22 7:30	9.53	197.5	9.42	43.7	29.24	0
1/18/22 7:45	8	179.4	9.56	43.42	29.25	0
1/18/22 8:00	9.2	178.5	10.91	43.29	29.25	0
1/18/22 8:15	7.483	168.3	9.15	43.21	29.25	0
1/18/22 8:30	6.266	162.7	10.73	43.16	29.26	0
1/18/22 8:45	6.74	162.8	8.68	43.09	29.26	0
1/18/22 9:00	6.059	155.8	11.66	43.03	29.27	0
1/18/22 9:15	4.695	151.2	10.13	42.98	29.27	0
1/18/22 9:30	5.962	140.6	8.27	43.12	29.28	0
1/18/22 9:45	5.412	139.7	8.18	43.25	29.28	0
1/18/22 10:00	5.271	138.8	10.11	43.34	29.29	0
1/18/22 10:15	6.107	134.3	7.47	43.44	29.29	0.01
1/18/22 10:30	6.377	134.2	7.397	43.5	29.29	0
1/18/22 10:45	6.087	133.8	7.979	43.66	29.29	0
1/18/22 11:00	6.822	135.2	7.413	43.83	29.29	0
1/18/22 11:15	6.077	138.8	9.02	44.24	29.29	0
1/18/22 11:30	6.356	148.4	13.32	44.16	29.3	0.01
1/18/22 11:45	6.023	177.8	11.9	43.86	29.3	0.01
1/18/22 12:00	5.244	169.8	8.61	43.88	29.3	0.01
1/18/22 12:15	5.529	162	9.86	43.85	29.3	0.01
1/18/22 12:30	5.577	172.1	13.11	43.9	29.29	0.01
1/18/22 12:45	3.863	188.8	17.65	44	29.29	0.01
1/18/22 13:00	5.235	187.2	14.96	44.15	29.29	0
1/18/22 13:15	6.172	186.4	12.8	44.5	29.3	0
1/18/22 13:30	5.114	177.9	13.09	44.69	29.3	0

NO DATA AVAILABLE IN 1Q2022 FROM JANUARY 18 2022 DUE TO WEATHER STATION ERROR

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